

# THE AMERICAN FARMER



"O FORTUNATOS NIMIUM SUA SI BONA NORINT  
"AGRICOLAS."  
Virg

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## THE CONTEMPLATED AGRICULTURAL COLLEGE AND MODEL FARM.

To the Editors of the American Farmer.

GENTLEMEN:—Having read in the daily papers the synopsis of a bill entitled, "An Act to Establish and Endow an Agricultural College in the State of Maryland," and feeling a warm interest in its success, I have made bold to communicate my views on the subject, hoping that many other gentlemen from different sections of the State may be induced to do the same. In a matter involving such a number of nice details there will of course be a great variety of opinion, but in order to form some idea of the kind of institution most likely to meet the wants of the whole State, a free and candid expression of opinion from all its different sections, would I think be advisable.

Let any man run his eye along the map from the ocean shore in Worcester county to Youghiogheny River near the western boundary of Alleghany, and without leaving his own fireside, he may be convinced of the fact that the State we inhabit, presents a great diversity of soil, climate and local characteristics. Here we have as many as five distinctly marked belts or tracts, differing in geological features; first the low alluvial tract supposed to have been of submarine origin called the Atlantic plain; then the Atlantic Slope extending from the head of tide-water to the foot of the first chain of mountains; thirdly, these non-fossiliferous mountains, including the Catoctin and the Blue Ridge; fourthly, the bituminous coal regions still further west; and lastly the lofty mountain meadows called the Glades. The whole of this variegated surface extending from the level of the sea to an elevation of 2500 feet, is inhabited by descendants from the English, the German and other nations, all varying in their habits, their wants and their degrees of culture.

Within this space too may be found every possible species of landholder and almost every conceivable variety of the genus "agricola." The honest and hard-working deliver of his own soil with his own hand, the opulent slaveholder who in some cases even entrusts the labor of supervision to his overseer, the experimental farmer ever in search of the new, the conservative farmer, a contented follower of the old, the practical farmer, the fancy-farmer, each has here its respective type and representative.

I happen to have my residence on what geographers have called the Atlantic Slope. My farm has on it an abundance of iron ore and limestone, the surface of the land is undulating, and every hill-top commands a fine view of the Catoctin mountains, the nearest point of which is between eighteen and twenty miles. A ridge of hills of moderate elevation extends parallel to these mountains and furnishes me with the necessary woodland. The waters which arise from or flow through my lands, after often changing their names, empty into Potomac; they have a rapid descent and are seldom affected very materially by the drought. The elevation is higher than the foot of the first chain of mountains to the west, and of course several hundred feet above the water level to the east. From these data you will at once see that the climate must be healthful and bracing. My neighbors are principally of German descent, and if questioned on the subject will generally tell you their forefathers came from Pennsylvania. They delight in large red barns with glass windows; they prefer horses to mules, and like the fattest and the largest that can be procured; they are extremely thrifty, honest and industrious, and without talking or writing much on the subject of farming are perhaps among the best farmers in the whole State.

For myself, I was educated for one of the learned professions, and for this reason have never been able to attain that practical proficiency in Agriculture which is possessed by those around me. For eight years I have been residing as proprietor upon my paternal acres and shall, probably, pass here the remainder of my days. Heretofore I have employed the services of a tenant, with whom I have divided equally the proceeds of the farm, he being at the whole labor and expense, except being required to furnish but half the seed. I am about making an alteration in this system, and reserving the larger portion of my farm for pasture, I let out a few fields every year to be worked on the shares. By this plan I hope to combine in some measure the advantages of grazing with those of tillage, the one enabling me to realize something by the sale of cattle and horses, the other furnishing grain for home consumption, and also a portion for sale. By this means too all those little causes of collision are avoided, which almost inevitably arise where landlord and tenant live on

the same farm, and, what is a matter of some importance, I secure the whole of my pasture-land for the benefit of my own stock. A very small portion I intend to farm myself. This mode of life is easy and independent, though I am conscious that under a different system more money might be realized from the same number of acres. But hired labor being extremely expensive and slave property very precarious, it seems to be the system best adapted to my present circumstances and capabilities. It is only necessary to add that I have two sons, both of whom may possibly become cultivators of the soil, to enable you to see why I take so warm an interest in the contemplated Agricultural College.

I shall therefore without further preface give you my ideas on this important subject. They are only those of an humble unit among many thousands, and as such, may stand for as much as they are worth. Of course they can be given only in extreme outline.

The College then in my opinion should combine some of the features of a manual labor school with all the advantages of an institution of science. The Model farm on which it is to be located will afford ample opportunities for accomplishing this two-fold object. It might be cultivated in part at least by the pupils under the supervision of the professors and board of Trustees. In the same way that cadets are exercised in their military evolutions at West Point, and the students in our Naval Schools are trained to practical navigation by excursions on the water, the young and growing farmer might be taught to plough, to mow, to stack, and to cradle. A practical workman might accompany and guide them in these manual labors, and premiums might be awarded to the most skillful. This would give them a great advantage in after life, for no man can judge of a day's work on a farm, or properly direct its progress, so well as he who is capable of performing it with his own hands.

Besides, consider for a moment the physical training attendant upon such a course. For my part, I should like the muscles of my son as well as his brain to be exercised, confident that under proper management, any increase of strength in the volume of the one, would only be adding to the powers and capabilities of the other. I should like him to be trained not only to analyse the soil, but also to master it by the aid of a strong will and vigorous sinews. I have been told that in the military system of Prussia, even the sons of the King are required at first to curry their own horses and to do all the duties of a common soldier. What system of callisthenics could be adopted, so well calculated to broaden the chest, invigorate the muscles, strengthen the lungs, and establish the constitution, as the varied and manly labors of a farm. I should like my son not only to be able to curry his own horse, but to bleed him, to shoe him, to master him when fractious, and to cure him when diseased.

The more practical the system of instruction the better. Ideas should be conveyed to the brain not only through the medium of words, but the objects themselves be presented to the taste, touch, smell, ear, and sight of the learner. He should be taught to make and record daily observations on the signs of the weather, the direction of the winds, appearance of the clouds, and how to consult to advantage the thermometer, the barometer,

and the hygrometer. He should be brought daily into close and loving communion with nature. And in pursuance of this object, early rising should become a fixed part of the system. The young cheek of the learner should often be moistened by the early dews of the morning. He should often inhale the aroma from the fresh-turned sod.—There might be a hospital for diseased animals, where the lecturer on the veterinary art might illustrate his principles by an appeal to nature herself. The lecturer on botany should have before him living flowers fresh-gathered from the field, the garden, and the greenhouse. The professor of geology should have power to dig as deep as he chose below the surface, so as to bring to view all the underlying strata. And for obtaining an extended insight into the geological formation of the whole State, what more delightful plan could be devised than an annual excursion on the Baltimore and Ohio Railroad? Here the labors of the engineer have opened a broad vista for the eyes of the observer, and the band of youthful and happy brother-farmers might be wafted as if by magic from the level of the salt wave which rolls up from the Atlantic, to the fresh well-heads and tumbling torrents which pour down toward the Gulf of Mexico.

An Agricultural College, judiciously organized, generously endowed, and with a Board of Trustees to be presided over by the Governor of the State! Here if any where, an enthusiast for the improvement of his race might be permitted to indulge his feelings without incurring the charge of extravagance. My word for it, gentlemen, if in such an institution your sons become good and strong farmers, they will very certainly become at the same time good and strong men. Not only farmers therefore should be called upon to contribute to this great object, but merchants, capitalists, and all who feel interested in the progress of humanity.

It would be a proud boast for Maryland, should she be the first to organize such an institution on a proper basis. Her example would soon be followed by all her sister States. And if Congress, in accordance with the views of General Washington, would make a liberal appropriation for a United States Agricultural College, and Model Farm, then indeed would the Farmer begin to feel his true position in the community, and the Union be consolidated by bands stronger than those of iron. This would form the keystone to the great Agricultural arch. The whole scheme would be in beautiful analogy with the political features of our government. And as the Governor of each State might preside over the board of the State institution, so the President would naturally be at the head of the councils of the other. Might not one of the objects of the United States College be to educate professors for those of the several States? And as all information would have a natural tendency to flow towards the centre, so from that same centre it would be radiated with rapidity to the most distant extremities. We should thus have a grand system of affiliated institutions, all looking to and around one common body, each independent and self-balanced, and yet all lovingly attracted to each other, and to the common centre, and each supplied from this common source, with instructors, with a knowledge of the latest discoveries and inventions, with rare seeds and plants imported from distant lands, and all bound together in one harmonious and mutually improving brotherhood.

A WESTERN SHORE FARMER

**PRICE OF LABOUR AND LAND—CHEAP HOUSES.**

*To the Editors of the American Farmer:*

Agreeably to promise, I send you a second article on the Year-Book of Agriculture.

Where land is cheap, the price of labour must be high; and so long as Government pursues its present policy—that of throwing into market annually such large tracts of land, at an almost nominal rate—this state of things must rather increase than diminish. Even if Government were to change that policy, it is doubtful whether its effects would be felt materially for a long period. It may well be asked if higher interests would not be subserved by restricting the sales, or elevating the price of public lands? If it be more profitable for a farmer to cultivate well a few acres, one would think that it would be more advantageous for the country if the Government would do what is in its power, to avoid adding to the already vast tracts of uncultivated land in the market. Seven acres was thought to be a sufficient estate, under the Roman empire; and how long a time would elapse before that part of our country, already surveyed and sparsely settled, would come to be properly tilled, even calculating the unparalleled increase of population by birth and emigration. At the present period, the employment of free labour by farmers is becoming almost impossible. In some parts of the country to labour is already considered a disgrace. Hence the substitution of the word "help," for that of labour or service. Notwithstanding the exorbitant price given for the work of all classes of mechanics, the supply is not equal to the demand of a rapidly increasing population. The number of buildings that are being annually constructed is truly enormous, and this is mainly done by contract, because those who make it their business find it more to their profit to do so, and are in a position to enforce their will on their employees. Not satisfied with a large price for an honest day's labour, the contractor knows that he can realize infinitely more money and arrive at fortune much more rapidly, under the system of contract; which means, in plain terms, that the contractor charges most frequently not less than double for the hands he employs and the amount he pays to each, and levies a per centage as heavy as will be borne, on each brick, nail, and foot of timber that enters into the building, or that he furnishes. The Hand-Book contains an account of a new method of building "stone houses," which promises many and decided advantages over other materials now in use.

Mr. Ball, of Massachusetts, says as follows:

"Last year (1854) a stone machine-shop, 400 feet long, 40 feet wide, and two stories high, with walls 21 inches thick, was built in Worcester, of a kind of slate, in the following manner: The entire mass of stone blasted from the ledge, was carried to the building, the nature of the ledge being such that a very large portion of the stone obtained by blasting was in small pieces; into the mortar, which was made of lime and sand, were put, and intimately mixed with it, all the small chips and fragments. All the larger stones were reserved for the process of filling in. The walls were made by filling the mortar into boxes, made by placing planks outside and inside of the wall, a distance apart of the desired thickness of the wall. These planks are kept in their places by plumb straight-edges of sufficient strength, placed and fastened upon the outside of the planks. When

the planks have been thus properly disposed in their places, to a height of three or four feet above the foundation, the mortar, in a very plastic state, is brought from the mortar beds in hods, and poured into the space between the planks. Into this soft, yielding mass, were disposed all the larger stones, in such a manner as to make the wall one solid mass of mortar and stone. These processes of alternately filling with mortar and larger stones are repeated until the mould is full.

"The mould or planks, forming the wall, are allowed to remain upon the walls until the mortar has set—say 24 hours or more, according to the quality of the mortar; and are then removed and re-set, and all the foregoing operations repeated, until the walls of the building are completed. The windows and door frames are made and set in the same manner as they are for brick buildings; over the doors and windows is put a wood or stone lintel, to hold the pressure of the wall until it is dry. Care is to be taken in placing all of the stone around the windows and doors, to have them permanently fixed in their places, so as to have a solid jam. The flooring timbers are placed and anchored into the walls in the same manner as they are in brick buildings. As this kind of wall is somewhat uneven for the reception of the flooring timber, a piece of scantling, say 24 by 6 inches, should be placed and levelled upon the walls and be firmly bedded with mortar to receive the joists and other flooring timber. The exterior of buildings constructed as above can be finished, if desired, with either "stucco" or mastic, and the expense of the whole stated to be not far from the cost of common wooden dwellings, or from \$1 25 to \$1 50 the square yard of the wall all finished," &c.

Mr. Fowler, of New York, has, in a small volume called "Homes for All," published his experience upon the same subject; and really building, as he describes it, is no longer formidable to the lightest purse. By pursuing the method described, any man with practical good sense, and with day labourers, such as we have them, (even the Irish,) may construct, without the aid of contractors, architects, or undertakers of any description, at a comparatively small cost. The concrete mortar has many decided advantages. A wall of that material makes a durable and comfortable house; warm in winter, and the reverse in summer. It offers advantages in the construction of chimneys, or rather dispenses with the necessity for their separate construction.

For ducts, of all kinds, for smoke, ventilation, water, &c., may be carried up with and in the wall, without adding to the cost, and are as efficient as any other. The cost of the material is small, the principal item being for lime, (refuse lime such as is usually rejected at the kilns, would appear to answer as well as the best). Mr. Fowler says that one part of such lime, to thirty of gravel, sand and stone, is all that is necessary and all that he used in his dwelling, which is 360 feet in circumference and several stories high. He advocates the octagonal form of building over all others, not only for solidity and convenience and elegance of division, but for economy of space inclosed. For instance, a house, say 16 by 40, will require a wall 112 feet in circumference, inclosing a space of 644 square feet, whilst an octagon of 14 feet side gives precisely the same amount of wall which in this instance incloses 1054 square feet. These are manifest and palpable advantages not to be underrated.

This material has been adopted in different parts of the country where gavel is common and other material scarce. In Washington City the foundations of some of the public buildings have been made with concrete. Doubtless there, no economy has been considered, and its employment is a proof of its advantages. I have understood that in those constructions hydraulic cement has, at least, been partially used instead of lime. That material is more costly, and I am somewhat in doubt about the utility of its employment. It is thought that hydraulic cement resists the corrosive action of time, which in some instances may be the case; but the difference cannot be very marked. For the only difference between a limestone, which on calcination will yield hydraulic cement, and an ordinary limestone, is, that the first variety is obtained from limestone which yields, on being treated by an acid, some 25 to 30 per cent. of insoluble residuum; (sand, silicate of alumine, &c.): a limestone containing that amount of insoluble matter, will give what is termed an eminently hydraulic cement, becoming hard when immersed in water, in 24 to 36 hours. Such limestones are common in our limestone formations, in the valley of Virginia and elsewhere. I have analyzed specimens from various localities, for the purpose of detecting these qualities; and they are by no means uncommon. A knowledge of their composition has led to the formation of hydraulic cement by the admixture or addition of sand or the proportions of the materials found in the natural cement, and those thus manufactured are considered equal to any other. It is a question, in my mind, whether mortars made of ordinary lime and a certain proportion of sand do not possess, when once hard, all the properties attributed to hydraulic cements. I have strong doubts whether the Romans had any knowledge of natural hydraulic cements. The durability of their monuments is no argument; for who has not seen and remarked the greater durability of ordinary mortar in ruins in Europe, over the stone and brick material, to bind and solidify which the mortar was used? I have seen in such buildings the mortar standing out in relief, having resisted the corrosions of time, whilst the other material was worn away. I have examined chemically many mortars, and conclude they often have really all the advantages of hydraulic cements.

With this digression I return to the concrete wall. One of the disadvantages of all solid walls is the condensation of humidity on the inside, with its train of evil consequences. Mr. Fowler meets that objection by denying that his house has any such inconvenience. He admits that his wall is somewhat porous, and that may be a preventive.—The opinion prevails, and it cannot be denied, that all cool bodies, when exposed to the atmosphere when in a certain hygrometric condition, must naturally condense humidity; to avoid the ill effects of which solid walls are lathed and plastered, which adds considerably to the cost of construction. I am informed that buildings have been erected in parts of the country, which, whilst they have all the advantages of the simple solid concrete wall in economy, &c., have some decided advantages over it, dispensing with the lathing and plastering, and perhaps possessing some other merits which that does not. I mean bricks of concrete. Thus, bricks formed of lime and gravel and made in moulds, each mould being 18 inches long, 9 inches wide and 4½ inches thick, would give a

mass eight times as large as the ordinary burnt brick. They are made with great care, by shovelling the mortar into the forms, which are struck off as you would grain from a half bushel. They soon set, when they may be turned out to dry. A gravel bank near any stream is a fit place for their manufacture, and any common labourer is equal to the task. They need but to dry and require no burning, and their size permits them to be laid with great expedition. By constructing a wall 18 inches thick, with a vacant space in the centre, or rather two walls—one, the outside 9 inches thick and the inner wall 5½ inches, leaving an interior vacant space of 4½ inches, the two walls being tied together, at intervals, by the brick laid lengthwise across—you inclose 4½ inches of air, one of the best non-conductors. The hollow wall enables you also to run doors and windows into the wall, instead of hinging them, with other advantages over the concrete wall. Mr. Fowler, in speaking of the cost of constructing the solid concrete wall, says that such a wall may be put up cheaper than it would cost to clap-board the same. T. G. C.

Prince George's Co., Md., Feb. 13, 1856.

#### SCARCITY OF LABOUR—FREE TRADE.

SEVERN SIDE, *Anne Arundel County*, }  
February 14, 1856. }

*To the Editors of the American Farmer.*

Gentlemen:—The suffering caused among the laboring classes in our cities, by the severity of the weather and the suspension of business for so many weeks, is, according to the newspapers, at this time most lamentable. Will not these distressed people learn from this cruel experience a lesson of wisdom; viz: that their most certain dependence for bread and the comforts and conveniences of life, is in the Earth—that nursing mother of us all? Let them seek homes and employment in the country, where, with ordinary industry, they will be independent of the trials and vicissitudes which now encompass them—starving and freezing their bodies, tormenting their minds, and too often wounding and crushing out the finest sensibilities of the heart. We have here in Anne Arundel thousands of uncultivated acres, upon which they could expend their labor most profitably. If unable to purchase, they could rent farms upon favorable terms; for, considering the present unproductive condition of the land and of their own labor, almost any terms for the employment of both must be mutually advantageous to landlord and tenant. I may state here that I have land capable of producing good crops, which has been idle for years and still remains unprofitable, for the sole reason that I have no labor to expend upon it. This I would lease to honest and industrious men, free of tax and with ample *house-bote*, *fire-bote* and *fence-bote*, (as the old law books term it,) for a share of the crops.

But while there come out to us from the cities these mournful complaints of high prices, want of work and their attendant train of evils, we in the country are suffering no little inconvenience from a scarcity of labor. I have never before experienced so much difficulty in obtaining farm hands. Slaves are no longer to be hired; their owners generally preferring—in the present condition of the grain and tobacco markets—to make larger crops, and in some instances to buy or rent land, rather than hire out any supernumerary servants.

Our free black population has of late been rapidly diminishing,—seeking the atmosphere of towns as more congenial to their indolent habits,—and the worthless few who remain, unless hard pressed by their necessities, will not work for less money than would be required (as facetious Tom Hood says) “to gild ‘em.”

City laborers who seek employment in the country frequently commit the mistake of demanding city wages; and which are entirely incompatible with proper farm economy, except upon such occasions as harvest, &c. They never forget to tell us that they are accustomed to receive \$1 per day, but they seem to be totally oblivious of the fact that in the cities they are idle, and perhaps in debt, during many months of the year. When will they learn that steady employment, with board and half these wages in the country, will make them richer, better, and more healthy men?

I have perused with much pleasure Mr. Calvert's Frederick speech, published in the Farmer of February; and, while I admire the candor and propriety of the remarks with which you accompany it, I particularly regret, Messrs. Editors, that you cannot advocate “the views he so earnestly sets forth on the subject of a tariff.” With equal frankness, but with a much less influential pen, I beg leave to express my approbation of that address in all its parts,—*ab ovo usque ad mala*. I also was attached to that political party which, through so many eventful years, battled for a Protective Tariff; and though I remained with that party until, striking like a full freighted vessel upon a hidden rock in mid-ocean, it sank—all sails and colors flying—into the bosom of a tranquil sea; yet I had found good reasons for changing my views upon the policy of taxing imports, and by consequence, the whole nation, for the protection of a few ungracious manufacturers, long before the loss of the good old Whig ship. The long sought *home-market* has proved a fallacy,—a mirage in the political horizon, ever attracting and ever eluding us. When but lately it seemed almost within our reach, we have perceived how “our treacherous manufacturing allies,” (as you justly denounce them,)—to enrich whom we have paid millions of dollars—have fled for additional *protection* to the granaries and fisheries of the British Provinces; and I believe they would live on *granite soup* rather than make the least sacrifice to the agricultural interest of the country. I cannot but think, gentlemen, that our best policy is that of free trade, with all nations. Let us sell in the highest markets our merchants can find, and buy in the cheapest. We have already done as much for domestic manufacturers as patriotism requires;—more than the manufacturers themselves have deserved. Our facilities for manufacturing are greater than those of the most favored nations, in all save labor;—and that will soon be abundantly supplied, if we do not violently stop the stream of emigration. The opponents of Free Trade would fain alarm us with doleful prophecies of the injurious effects of this policy in time of war; but—these, if they existed at all, would be of brief duration, and are not comparable to the long evils of the Protective system. Moreover, a state of war is not the natural state of a civilized people; and while they should not be unprepared for it, their legislation should look mainly to the interests of Peace.

The present revenue system is, as Mr. Calvert remarks, an insult to the intelligence of our peo-

ple; and if the idea of a *direct tax* for the support of the Government has become odious, it is because too many of our professional politicians have taken pains to mislead the public mind upon that subject: since nothing is more clearly demonstrable than that under the Tariff “the poor man with a large family to support” (and it is the fortune of many to be in that category) “pays more tax than the single capitalist with his millions.” The natural wants of the family being greater than those of the unmarried man, it is evident that the burden of taxation falls more heavily upon the poor Benedict than upon the wealthy Bachelor; since, under the system of levying import duties for the support of the Government, it is the *wants* and not the *means* of supplying those wants of man, which are taxed. Under a direct tax, it would be otherwise: the wealth and not the wants of the people would be taxed. And now brother farmers, which system deserves to be considered odious? Beyond this, the only difference is in the *mode of collecting* the revenue. Instead of paying it into the saddle-bags of those much abused individuals—the tax gatherers—we now pay it to our merchants in the enhanced cost of almost every article we buy; and they in turn pay it into the National Treasury in the shape of import duties at our custom-houses. There is however, I confess, a charm in the tariff; and that is the ease and celerity with which our purses are bled by its agency. It is,—if I may so term it,—the *chloroform of politics*, under the influence of which the otherwise painful operation of levying taxes is so performed, that the citizen is entirely unconscious of it.

But among the important advantages which might be reasonably expected from direct taxation, is the greater economy and higher standard of morality which it would demand and obtain from those whom the Constitution entrusts with the expenditure of the public treasure. Under the present revenue system we have been, of late years, blessed, or rather afflicted with an overflowing Treasury; and as a natural result, the expenditures of the Government have gone up from about thirty millions under the regime of Mr. Van Buren (and whose administration we all know was well abused for its extravagance) to more than sixty-six millions of dollars in the last fiscal year, ending July 1st, 1855. The annual receipts into the Treasury during the same year were but sixty-five millions; so that even that enormous sum did not suffice for the wants of the Government; and spendthrift Uncle Sam would have been bankrupt, had there not been (strangely enough!) a balance remaining over to his credit in the treasury from the previous year. I grant that much of these vast receipts from customs have been expended in the discharge of our war debts, the increasing of our national domain, and in the government and improvement of distant and expensive territories. But can it be doubted that many lavish expenditures would have been avoided if Congress, instead of finding the public crib annually full to repletion, had been required to draw their appropriation bills upon a treasury supplied by a direct taxation of the people? And would not the people themselves have examined those bills more closely, and have held their agents to a more strict accountability for any misapplication of the revenue? It is with governments as with individuals,—money easily obtained is soon spent. A full purse tempts to prodigality, and many a dangerous scheme for

squandering the public funds now finds favor in high places which would not be tolerated if those funds were drawn directly from the people. So open and systematic have become these attacks upon the Treasury, that Senator Benton not long since felt called upon to rebuke loudly the plundering cormorants assembled in Washington during the sessions of Congress, and who (as he remarked) "converted the Capitol of the nation into a vast buzzard roost."

The Secretary of the Treasury in his late and in many respects—admirable Report, while holding out to us the hope of a possible reduction of duties, "to the amount of some ten or more millions of dollars," also recommends that in re-modelling the Tariff, "the free list be so reconstructed as to include all the raw materials used in our manufactures." Against this I believe it to be our duty most earnestly to protest; unless it is to be followed by the abolition of imposts upon all foreign fabrics. It will be burning the farmer's candle at both ends. We have already paid for the protection of our manufacturers in the increased amount of our store bills as aforesaid; and now they would have us surrender the trifling protection heretofore accorded to some agricultural products! Will not forbearance on our part soon cease to be a virtue? Nor is it at all an agreeable feature of this business, that the proposed modification of the Tariff is to redound chiefly to the advantage of that portion of our country of which we have had so many reasons to complain. But that consideration would not have a feather's weight with me, if there was any justice in the measure.

If we are to have even a Revenue Tariff, let its burdens fall equally upon all interests and sections of the country. But for one, I prefer *Free Trade, Direct Taxation and Farmer's Rights*; and in this, not farmer's rights only—but *the rights of man*; since it is my conviction that nothing is more essential to individual and national prosperity, or to the great cause of christianity and civilization,—which should be dear to every enlightened mind,—than unrestricted commercial intercourse between all tribes and tongues upon the earth. Look across the Atlantic, and see what the abolition of the Corn laws has done for millions of famishing human beings in that direction. Then turn your eyes across the Pacific, and behold the bright visions that beckon religion and commerce to that quarter of the globe; and which would soon be realized if Japan and her kindred nations did not, true to their barbarous instincts, resist the humanizing policy of free trade.

But I have written more upon this interesting question than I intended when I sat down; though I am sure, Messrs. Editors, you will have no objection to its discussion in the pages of the Farmer—provided it be not conducted in a partizan spirit. I hope that some of your readers who have the leisure and the materials for the task, will show us by facts and figures the precise effect of our Tariff policy upon the great interests and classes of the country. All could then the better judge whether direct taxation of the property of the nation was or was not the most just and economical mode of supporting the splendid and, I trust, indestructible fabric of our Government.

After all that has been spoken and written in this country, upon the subject, I fear that our financial affairs are but little studied or understood.

How few, for instance, ever do more than glance at the long and dry reports of the Treasury Department. It is to be hoped, however, there are not many persons, at this late day, in the sad condition of the back-woods Carolinian, who (as the story goes) mistook the first locomotive he ever saw for the Tariff, and fled for his life. Had he known "the nature of the animal" as well as some do, he might have been more anxious for the safety of his purse.

What a winter we are having, Messrs. Editors! And the weather-wise will not promise us any decided change for the better, until the vernal equinox. You will be pleased to learn that the fruit buds are as yet uninjured. The mercury here, at sunrise to-day, was down to 80°. But that is quite comfortable when compared with the weather I encountered early last week during a brief sojourn upon the Catoclin mountain, in Loudon county, Va. On the morning of the 4th instant the cattle upon the farm which I visited were all observed to be bleeding at the nose, from the intensity of the cold. I have never known this to happen with animals in our latitude before. Birds were frozen to death in the woods, and even opossums were compelled to play possum in earnest.

Some persons, I am told, attribute the severity of the winter to the large persimmon crop last fall; but, gentlemen, I think it equally as philosophical to ascribe it to the fact that Dr. Kane neglected (an unpardonable oversight in a gentleman of his well known prudence and philanthropy) to close the door of the Arctic regions when he left them. Whatever may be the cause, it is too evident that the northern elements are in the ascendant, out of Congress as well as in it. Submitting the question to those who have a meteorological turn of mind, I am, dear sirs, your

WELL-WISHER.

For the American Farmer.

#### WHAT IS THE FIRST DUTY OF AGRICULTURISTS?

If it is desirable to raise the profession of the cultivator of the soil to a proper position in society, it must be done through the medium of that great lever of public opinion, the Press; and I therefore, Messrs. Editors, beg leave to call the attention of my brother farmers to the consideration of the above subject, in hopes of arousing them to the importance of establishing at least one daily journal which shall be exclusively devoted to the support of this great interest. The first impulse in nature is a thirst for distinction; and this feeling is not confined to the human, but extends the whole brute creation, and produces good or evil tendencies, according to the instincts acted upon. Why does the noble racer or hunter prick his ears and appear restive at the tap of the drum or the sound of the horn, if it is not from a spirit of rivalry? Why do dogs of high and low degree growl and fight, if not to show their superiority to their fellows? Similar instances, in confirmation of this theory, might be mentioned of the whole brute creation; but as my object at present is with the higher order of animals, I must postpone to another occasion this part of the subject, and at once come to the main point of my proposition. No one will deny that the Press manufactures public opinion, and that it is particularly desirable that the proper direction should be given to the source from whence flows our prosperity or destruction. Why do the ambitious and

noble sons of farmers leave the profession of their fathers and engage in less honorable ones? Simply because they are led away and deceived by the false coloring with which the public press, (not only the daily, weekly and monthly journals, but all other publications,) holds up as heroes, worthy of imitation, men of all other professions; and even the agricultural journals occasionally assist in this laudation of FOREIGNERS.

By these means false impressions are made on the young mind, and a wrong direction given to it, which, in nine cases out of ten, lead to disappointed hopes and bankruptcy; for it may be safely affirmed that, on a fair analysis of all professions, the happiness and prosperity of the agricultural classes are in that proportion to all others. In order to correct this evil it is necessary to have journals which will represent everything in true colors, and not lead astray the youth of our country from the profession for which man was originally designed. How often do we find those, who have held most of their lives the most distinguished positions in their various professions, retiring in their latter days to the peaceful shades of a farm to obtain that peace and happiness which all the pomps and vanities of political position and distinction could not give. Such a journal is necessary, not only to undeceive the public mind in regard to the honor and profits of this profession, but at the same time to protect it against the encroachments which are daily made on its privileges, and to point out and defend its rights against the impositions and exactions which are daily made upon them; for so long as the Agricultural classes yield their necks willingly to the yoke, will their burthens be increased. Such a journal should discuss every subject of political economy, and demonstrate the effects which will be produced on this interest by the legislation of our own or any foreign government, and thereby open the eyes of the cultivators of the soil to the lamentable fact that this interest, which is more important than all others combined, is never considered in legislating for the country.

Trusting that this subject will be taken up by some one more capable of showing its importance, I leave it for the present. CHAS. B. CALVERT.

Riversdale, Feb. 15, 1856.

ELLENDALE, Va., February 15, 1856.

To the Editors of the American Farmer:

Gentlemen:—Enclosed you have the amount of my subscription for the year to the American Farmer, which I had entirely overlooked in the multiplicity of engagements, where we have many mouths of bipeds and quadrupeds to feed; a duty especially onerous in a season of unprecedented severity and duration. We have not seen the face of mother Earth for upwards of seven weeks, and as we are just now having another fall of snow, Heaven only knows when this ghastly veil which shrouds Nature's loveliness will be removed.

I cannot express in words the gratification afforded me by the reading of Mr. Calvert's Address to the Frederick County Agricultural Society, as published in your February number, however I may differ from him on the subject of protection to manufactures, inasmuch as I think it has been shown that this policy is not partial in its application. It furnishes a home market for a raw material which is one of our most important staples,

and provides consumers for a large portion of our agricultural products, in operatives engaged in our factories, who would otherwise be producers if this branch of employment were closed to them and they restored to the cultivation of the soil, the natural sphere of occupation and subsistence of the class from which they have been drawn. I should say, too, that we of the farmer interest have our benefit in the reduction of price in every description of manufactured article we need, consequent upon the encouragement given to such by the protective system, which renders us independent of foreign manufactures so long as we are satisfied with such comfort and elegance as cotton and wool affords, and leave silks and satins and such world's fooleries to those who are ambitious of them. But these are questions to be discussed and determined elsewhere than in a farmer's journal; and I eschew them as I do politics in general, as too complicated for my plain understanding—resting satisfied, as I think we all may, that there is an element of conservatism in our people at large which will keep us in the right path, where important matters are involved, in despite of errors of government which, if they do not fall harmless, are attended with no very serious detriment to our national prosperity and advancement.

Had I been at Mr. Calvert's elbow during his address, there is but one suggestion I would have made which I should like to have seen incorporated in it; and that is that every farmer, however large his estate, should be, in a great measure, his own overseer. The merchant does not leave the control and direction of his counting room to his clerk; the lawyer his business to his students; or the mechanic his shop to his journeymen; or, when they do, we know what is the inevitable consequence. Why then should the farm be abandoned to an employee who, for the most part, has as little industry and intelligence as the force he directs, and no other motive than theirs for the exercise of a modicum of either—the security of his wages? If Agriculture be a science, and so it is, in all its minutiae, from cropping the ground to feeding a pig—if it involves, as Mr. Calvert rightly asserts it does, all other sciences from chemistry to such humble arts as scarce deserve the name, and yet are essential to success—why is its practice left to those who are ignorant of its principles and generally opposed to what they consider its innovations? as these would only add to their labors without augmenting their reputation or increasing their reward; while the proprietor, who has both at stake, is satisfied with an occasional glance at his deputy's actions, takes his reports of progress and results as gospel; lolls on the sofa within doors, unmindful of what is going on without; or seeks abroad, in politics or amusement, occupation for that leisure which becomes burthensome only because he has been taught to consider the wide field for physical, intellectual, and, I may add, moral and benevolent exercise spread around him by a bounteous Providence, unworthy of his personal attention. Plead for reform in this, Mr. Calvert, as eloquently as you have for correction of other abuses in your admirable address, and you will deserve another leaf—aye, and a bright one, to the civic wreath it has entitled you to; for we doubt not your own practice qualifies you to speak, *ex cathedra*, of the advantages to inure from it. Appeal to their interests, and tell them what a farm is when the eye, the mind,

the faculties and energies of the master give life and impulse to all its constituents, whether to the soil which, though inanimate, requires to be protected from injudicious exaction, lest it fall into sterility, or to the laborer who, without such supervision, is prone to violate the Scripture apothegm and prove unworthy of his hire. Appeal to benevolence, and tell them they are responsible for its exercise to the brutes that toil for them; the flocks and herds that feed and clothe them, and to whom they stand in the relation of Providence to man: for their natures are subjected to his, and though less tender, require protection and food and kind treatment—not always administered as they should be—by his careless and indiscriminating representatives. Appeal to love of nature, and tell them how wonderful are her processes; how grateful and ennobling the task of aiding in their development and multiplying their productiveness. Appeal to taste, and ask whether they will continue to resign the healthful breath of early morn, the perfume of flowers, the voice of birds, "the sights and sounds of rural life," the enduring evidences of a prevailing and benignant God, for the stifling atmosphere of cities, the chicaneries of the mart or of the rostrum, where man holds sway and human influences are directed by his great adversary. We will not ask a further appeal to wives and mothers, for you have already said enough to awaken woman's noble sympathies; and we are inclined to believe, from our own observation of her generous and yielding nature, that where he whose preferences for home renders a corresponding disposition in the partner of his fortunes desirable, the fault is usually with himself if he does not find her equally zealous in the discharge of its sacred duties, and equally contented with its rational enjoyments.

"Oh! what delight to struggle side by side  
With one loved soother—up the steep to guide  
Her faithful steps, unshrinking from the thorn,  
And front with stout breast the down-rushing scorn.  
And when firm will and gallant heart have won  
The hill-top, opening to the steadfast sun,  
Look o'er the perils of the vanquished way,  
And bless the toil thro' which the victory lay,  
And murmur, "which the sweeter fate? to dare  
With thee the evil, or with thee to share  
The good!" W. B. B.

#### JOINT WORM AMONG CORN.

To the Editors of the American Farmer:

In reply to your correspondent, J. W. K., who fears the insect he finds in "the dead weeds in his stubble field" is the joint worm, and that his corn crop may be injured thereby, I take occasion to say, that the joint worm is never found under the circumstances he mentions, and is not an enemy of the corn crop. The insect he describes is probably the "Bore worm," as it is often found in rag and stick weed, running briars, &c. This is a serious pest to the corn crop, and I know of no other way of guarding against its ravages, than by planting very thick, and applying guano or some other fertilizer in the hill, so as to force the young plant out of reach of the worm.

The nidus of the joint worm is wheat, rye or barley, to which crops alone it is injurious. I have never been able to discover it in either oats or timothy; it certainly can never be found in corn. If your correspondent ever sees the effect

of joint worm, he will recognize it at once. Its first visible effect is usually seen when the wheat is about 8 or 10 inches high, at which time its growth is checked, and the lower blades assume a yellowish color. When the main stem is injured, the plant shoots out suckers, which grow feebly for a short time, turn yellow, and present the appearance known to farmers as "seding." When this is the case, its ravages are often attributed to "Hessian fly." A careful examination, however, discovers small knots or galls on the blade near the joint, which increase in size until by pressing upon the sap vessels of the plant, the circulation is obstructed and the plant languishes. When the deposit of eggs is made at a later stage in the growth of the crop, the straw affected is distorted into various fantastic shapes, sometimes *kneeling* down at various angles to the natural position—twisted and turned into all sorts of shapes. The blade is sometimes wrapped so tightly around the straw as entirely to prevent the egress of the head. These galls are produced by the Joint Fly in making the deposit of its eggs, and they increase in size as the larva grows. They are usually when of full size about  $\frac{1}{2}$  of an inch long, and harden and change color as the straw ripens. These woody tumors contain cells in which the insect in its pupa or chrysalis state is found. The worm when fully grown is about 3-20 of an inch long, of a pale yellowish white color, with an internal dusky streak. The fly is about 1-10 of an inch long, body jet black, with a yellowish tinge about the legs. The female is armed with an ovipositor or piercer about as long as its body. The fly comes out in this climate in great numbers about the first of May, but occasionally is found undergoing its transformation at other seasons of the year. This enemy of the wheat crop made its appearance in our county about '45 or '6, and only commenced sensibly to decline within the last year or two. Last year our crops were not injured, I should think, more than one or two per cent.; and as the parasite, to which we are indebted for this good work, was to be found last fall in numbers equal to the insect upon which it preys, we confidently calculate upon the total disappearance of our great enemy in the course of a year or two.

Yours truly,  
January, 1856.

ALBEMARLE.

#### THE JOINT WORM IN CORN.

ALBEMARLE Co., Va., Jany. 8th, 1856.

To the Editors of the American Farmer.

Gentlemen: Your ever welcome Farmer came to hand last night, in which I find your correspondent, J. W. K., in almost as deplorable a condition from a perfectly groundless apprehension of the joint worm swarming from his fields of rag weed next spring to the total destruction of his corn crop, as were old Belshazzar's knees at the finger's scrawl upon the wall. J. W. K. may be at perfect ease, now and forever, so far as the joint worm ever can, under any circumstances or condition whatever, injure in the least degree the corn crop. Why, my dear sir, just as soon would I apprehend danger from the miserable little cut worm attacking this winter night my fine herd of mixed Devon and Durham stock under their comfortable shelters, and cutting off the legs from every one of them before the morning's dawn.—Yet, whilst I would thus lull you to repose about

the joint worm, let me warn and loudly warn you, J. W. K., to be up and doing, for you have cause, just cause, to be greatly alarmed from another, and I do assure you, no trifling enemy to the corn crop, which I am told by my old and very observant friend and neighbor, Mr. Thos. Jefferson, does breed and winter in that self-same rag weed of yours, known hereabouts as the boorer worm, which is sometimes greatly destructive to our corn crops, and if J. W. K. is not very careful, they will give him fits next spring, in replanting five times as much corn as it first took to plant the crop, and he'll have a woeful bad stand at that.—Good gracious! methinks I can hear J. W. K. exclaim in great horror; what shall I do to be saved? Why, just remember to do this, and do it like a farmer, and you will be safe. In early spring, whilst rolling and harrowing your ground, preparing for planting time, sow thinly over your field a mixture of corn and oats, in time to come up fully before planting time, then run off your corn rows in such a manner as that the laying off and covering will kill out the corn and oats in the corn furrow. By the time your corn comes up, all these worms and pests will have assembled between the corn rows, and will feast and riot there until the corn crop will be far beyond their reach. Then in working your corn, turn but one furrow to the corn the first time, then another; by which time the green crop of corn and oats will amply repay for seed sown, in way of food to the young corn crop, and you will have no replanting to do, which will give you the great benefit of an even crop; and if your land is sufficiently strong, well drained, prepared and worked, with a good season, you will have a crop to report of next fall in the Am. Farmer.

I live in the midst of the joint worm range, and was driven two years from the wheat crop by them. I resorted to rye and oats; they injured my rye a little, though not seriously. I have heard some good farmers say their rye had been seriously injured by joint worm; I have heard some little farmers say they had seen the oats, timothy, herds grass, &c. &c. much injured by joint worm; but never heard any man suggest they might ever damage the corn crop. I have observed closely, and have ever believed these little farmers were mistaken about the joint worm ever doing the least damage to oats and the grasses.

Let me assure you, gentlemen, your views upon the Guano question are highly approved by the agricultural community hereabouts, and we are ready to do anything to get rid of Mr. Barrera and his miserable pack of Shylocks, to whom we have too quietly submitted already too long, and the agricultural interest should unite to a man, and compel their representatives in Congress to do something in this matter, or hold them to such an account upon their return home, as will keep them and the like of them at home henceforth and forever.

Respectfully,

GEO. C. GILMER.

#### MR. CALVERT'S ADDRESS—GUANO AND LIME EXPERIMENTS.

CAROLINE, Va. OLNEY, 8th Feb., 1856.

To the Editors of the American Farmer:

Gentlemen—I acknowledge full profit and entertainment from the perusal of your valuable little sheet: the contents of which is frequent subject of conversation, and the commendable instruction

conveyed, is best illustrated in the visible improvement of every farm whose proprietor reads the Farmer.

I was particularly struck by the speech of Mr. Calvert, in your February No.; politically, I have for 25 years, occupied exactly his position—I now take my stand—that is to say, reflection and experience has placed me, by his side. My mind opens to every word uttered by him—truths told not often in such burning words.

But what induced me to take pen in hand, was the communication of G. C. Gilmer, of Albemarle, with regard to the application of lime with Farm-pen manure, and Guano, &c. Permit me, whether useful or not, "to give in my experience." In January '54, I hauled on and covered over thick with wheat straw, about 40,000 Tobacco hills, (a lot that had laid a year or two in clover, herdsgrass, &c.) so thick was the covering of straw, that I was unable to turn it under with good 2 horse ploughs; after ploughing and sub-soiling each furrow, we harrowed the lot: it laid several weeks, when we hauled on and spread farm pen manure; we then reploughed and listed the land, applying about 200 to 250 lbs. Peruvian Guano per acre. As the seasons occurred, we planted and replanted Tobacco; the season was dry—I do not think more than two-thirds the hills had plants to live—about one-half the remainder made tolerable Tobacco, from excess of undecomposed vegetable matter in the land. My practice is to sow Tobacco lots always in wheat and clover, but having expended so much labor and manure on this, and having failed so woefully, we put it in Tobacco again last year, '55, with a light dressing of stable manure; in the fall, the plants being about to come in top, we sowed about 150 lbs. Mexican Guano, broadcast, and ploughed the Tobacco the last time. It made a very fine crop, the season being fine throughout the year. In the fall we ploughed up this lot with another of 12,000 hills with 2 horse ploughs—sowed a mixture of Peruvian and Mexican Guano (in proportion of two of latter to one of Peruvian) say 150 lbs. to 200 to the acre, harrowed well the Guano and Wheat, at the same time. This proportion we put on the field crop, 70 acres. About a week after, before the wheat was up, we sowed on the surface, 5 tierces of air-slacked lime over the whole, say 11 acres, i. e., about 3 bushels lime per acre; the wheat looked strong, and thrifty, before the snow which fell about 5th January, and has been covered up to the moment I write. If the great enemy to the wheat of this region, for 3 or 4 years back,—the joint-worm, do not destroy it, I calculate on a splendid crop.

I am sorry to see by your Farmer, that our Spring supply of Guano will be short—of course, the price high. It furnishes the only power by which we can hope to resist the ravages of joint-worms. Indeed, my expenditure in seeding last fall's crop of wheat exceeded the income of the two crops preceding jointly. If I fail the next crop, I shall begin to think seriously of seeking some region remote from the scourge; this is no small consideration to one who has been laboring a quarter of a century and more, to make plantation and premises profitable and comfortable for a pretty large family of 8 children and 30 odd blacks.

I have written in an unpremeditated and familiar manner to one (Mr. S.) with whom I have no acquaintance, except through his works. I trust my obtrusion will be appreciated rather as an acknowl-

edgment due yourselves, than as expecting to communicate any thing new or worthy of notice. Respectfully, your obedient servant and well wisher,  
JOHN V. KEAN, of Caroline.

*For the American Farmer.*

### "THE HOG—AN ESSAY."

I was quite interested in the Essay on the Hog, in your February number. Much information was imparted, and some that I deem important and should be generally understood, was omitted.

"Males and females should not breed until 12 months old." Excellent advice. It is too much the practice to let a young sow have a litter by the time she is 12 or 15 months old, and then kill her.

This is decidedly wrong. Those who desire fine pigs should keep one or more breeding sows (according to the size of the farm or stock they intend to raise). After two or three litters they generally improve as *mothers*. They are large and roomy; they bring much larger, *stronger and more* pigs at a litter, than a year old sow. They nurse their pigs well, take more care of them, have a better supply of milk, and pigs from a two, three, or five year old sow will grow twice as fast and be twice the size at four weeks old, of those from a young sow.

A large old breeding sow is worth as much as a good cow to a farmer, and will net him as much and more with less labor. She will have certainly two litters a year, or five in two years, and will average 10 at a litter after the third or fourth litter; and as good pigs will bring \$2 each, or \$40 a year, it is more than a cow will produce.

I say, don't kill old sows. Remember they are good nurses and experienced mothers. It is the wild and reckless young sows that kill the pigs. When a sow litters she should not have too much straw, and what is furnished should be very clean, and *short cut* straw is the best; but dry, clean leaves from the woods is still better.

Those who keep a large boar and large sows for breeding find their gain in it; and those who have not tried it, and will do so, will find it to their advantage. Such is the experience of one who has tried it, and the result was highly satisfactory.

J. C. T.

### "Earthing Up" the Common Poke for Salad.

*To the Editors of the American Farmer:*

Gentlemen:—In looking over the first number of Good's Family Flora, I see some valuable medicinal qualities attributed to the common Poke, or "*Phytolacca Decandria*." As a vegetable, I think it very valuable. It is always found in our markets in the Spring, when the shoots are from 3 to 6 inches high; but is not much esteemed in its green state. It is frequently too old, and then becomes acrid to the taste, and sometimes has disagreeable effects. It comes, however, at a time when Asparagus is almost the only vegetable; and, if properly treated, is much better—being free from the strong flavour of asparagus.

The old stalks should be cut off close to the ground, early in the Spring, and a hill about 6 inches high made over the stool. When it begins to make its appearance at the top of the hill, the earth should be removed, the young shoots, then perfectly blanched, cut off, and the hill restored. In this state it has very little taste, and is perfectly tender. I have used it for many years, and it is generally preferred at my table to asparagus or

sea-kale. Dyspeptics may eat it with entire impunity.

Here is a good vegetable, quite neglected in the country, where it comes at a time when greens are very scarce, and is to be found in the greatest abundance in the fence corners and turning rows. Then, if suffered to grow up, it is a nuisance; and from its large woody root, hard to extirpate. By blanching it and using it as a vegetable, it is turned to good account; and frequent cutting weakens the roots, making it much easier to extirpate, when it becomes necessary to clean up the turning rows. Your ob't serv't,  
N. BREWER.

### SUPER PHOSPHATE OF LIME.

I make my own, and I have used a good deal. Every farmer can do the same, and save money by it, and be certain of having a good article. I have a mill for grinding bone; if any of my readers have not access to one, they can buy ground bones in any of our cities, costing more, however, than if they ground their own. I buy the bones in the rough for \$10 a ton. When ground they cost me about fifty cents per bushel. With your bones ground you will want one carboy of sulphuric acid, for every five to eight bushels of bones you wish to dissolve; the finer ground the bones are, the weaker the acid may be. Take the half of a molasses hogshead, and, setting it under cover, put into it say ten or twelve buckets of water, and then empty into that a carboy of acid, taking especial care that none of it splashes on your clothes, as it is liable to do; if any gets on your hands place them for a moment in water; then put in your ground bones slowly, lest the effervescence that takes place overflows; stir in all you can, say seven bushels; let it stand at least three weeks, six if possible, stirring it up once in a while. When you wish to use it, riddle on a floor two hundred pounds of the best Peruvian guano, on this put four bushels of your dissolved bones and mix thoroughly together, then add in dry sawdust, mixing it well until dry enough to sow by hand. If sawdust cannot be had coal-dust is the next best thing, or dry earth, or anything that will absorb moisture, except ashes. Ashes if mixed in would neutralize all that you had done, and put you back just where you started, dry bones. Prepared as I have here stated, you will have a fertilizer which, after repeated trials, I have found to be the best of any manure I ever used for both corn and wheat, acting on all kinds of soil with wonderful effect; and although not so nice to look at as what you buy in bags in our cities, has superior advantage of purity and economy. Your sulphuric acid you should buy from the chemists for two cents per pound; a carboy, I think, contains about one hundred lbs. You can figure up for yourselves the cost of your prepared phosphate.

When mixed as stated, I sow of bulk to the acre, what is equivalent to one hundred pounds of bones and one hundred pounds of guano. As you cannot make any calculation in sowing, for the amount of sawdust contained in that quantity, you must make up your pile for your field. For ten acres, say, you would want twenty bushels of bones and one thousand pounds of guano, your sawdust of course added to this. I have a way of my own for sowing, which I have found answers an excellent purpose. Putting a moderate load in a one-horse dearborn, I put my man wheat-sower in the tail, on his knees, on the stuff, and taking the lines,

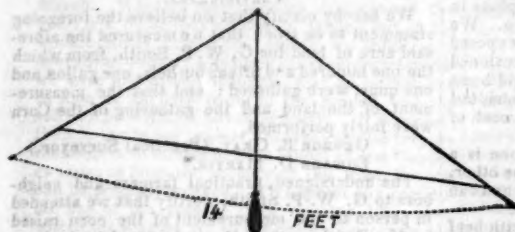
I drive round and round the field, keeping all the time about three feet from the last track, while my man sows constantly with his hand behind the wagon. I have found that this puts on just about the quantity I want, and puts it on well and expeditiously. I might say here, that I never sow it on the sod, generally after the first harrowing, although

once I applied it after the corn was up, with the happiest result.

If this fertilizer cannot be made at home, I would unhesitatingly prefer that sold in our cities to Peruvian guano.

DELWYN.

Chester County, Pa., 1855.



### HILL-SIDE DITCHING.

BELLEVILLE, Rodney Co., Tenn., Jan. 1856.

To the Editors of the American Farmer.

You wish to have the assistance of some of your readers in giving your Mississippi friend some information in Hill-side Ditching. Above I give you a drawing of a Leveller used in laying off ditches—14 feet from point to point, at bottom. The plumb is to be hung in the centre, at the top. Then get the centre of the cross piece. Make a mark one inch from the centre, so that when the plumb-line hangs in the mark, one end of the leveller will be one inch lower than the other. This will give one inch fall in 14 feet, which is sufficient to convey the water off as fast as it will collect in a very heavy rain. The ditches should be closer on steep lands, 100 yards between them. However, if the land is very steep and of a light sandy soil, have them closer. Have an eye to throwing the water out at the low side of the field. My plan of ditching is to plough the field first; then, in laying off the ditches, you will have tracks which you can follow with the plough, and save the time and trouble of staking them off. You can use any kind of plough, but a two-horse turning plough is preferable. Rake the dirt out with hoes. Leave the bottom of the ditch flat. If your field has gullies, in crossing them always give the ditch a little more fall, as the water coming down in large bodies is apt to break over: 8 or 10 inches is deep enough. The cost is trifling.

In laying off your rows for planting, commence at the low side of the upper ditch, so that if there are any short rows they will empty in the ditch below.

I have given you my plan for hill-side ditching. If you think it worth a place in the Farmer, you can publish it; if not, you can treat it as you no doubt have to treat a great many other communications: though, if my plan is not acceptable, I would advise every cotton farmer, if his lands are hilly, to adopt hill-side ditching.

Yours, &c.,

L. L. T.

"I wish the statement could be made to ring in the ears, and penetrate the brain, and stir the heart of every man, woman and child, who is the friend of Agriculture—that the radical means of improvement is the more perfect education of the farmer for his profession."—*Ag. Add.*

### WHEAT INSECT.

EDMONTON, N. C., Jan. 25, 1856.

To the Editors of the American Farmer.

Gentlemen:—In reading the number for this month, a few days ago, I noticed the communication which you published from L. A. Anderson, of Greenbrier county, Va., in relation to "a new enemy in Wheat." By referring him to the 654th page of the 3d volume of the "Plow, Loom and Anvil," he will learn that the same insect, as near as I can judge, committed serious depredations on a portion of my crop, in the winter of 1850-51. The land on which they appeared was a good soil for wheat, though rather light in texture to be first rate. In February I almost gave up my crop as lost, where the insects were spreading so rapidly; but early in March, when the spring growth began vigorously, the field soon became green; and even those plants which were yellow to the surface of the soil, sprang up and outgrew the efforts of the insects to check their growth. I cannot tell at what time they entirely disappeared; but I know that at harvest time I could see nothing of them, and the field produced more than an average crop. It was not as productive as the field adjoining it, in which they did not spread, but I did not expect it to be so, as the land in that field was of a better quality. The yield of the ravaged wheat was 13 bushels per acre. I am pleased to add also, that I have not seen the same insect since, though wheat has been sown on the same farm every year since, but one, and last year in the same field.

Yours respectfully,

T. L. SKINNER.

### FREEZING OSAGE ORANGE SEED.

To the Editors of the American Farmer:

In answer to many inquiries relative to the time and preparation of Osage Orange Seed for planting, allow me to make a few suggestions.

1st. Procure your seed from a responsible source, as much of the seed sold is vitally in the process of extinction from the Orange.

2d. Procure it early enough to freeze it. A convenient way to do this is to mix it with moist earth, or sand. Place the whole in a box and set it out on the north side of the house, and allow it to remain until planting season. If too late to freeze thoroughly by the above process, it may be well soaked and spread out on sheets for several frosty nights, gathering up early in the morning and putting in a cool place. Shake them up every day, until you are ready to plant. There is another method of molting which is much practised, but the freezing is the surest, safest and best. All nursery men know that apple seed planted dry, or after two or three days soaking, will remain in the ground until the second Spring before it starts. The same is true of the Osage Orange. I have had a fine crop of plants come up a year after planting.

H. W. PITKIN.

Manchester, Conn., Jan. 15, 1856.

**CISTERN—CURE FOR SCRATCHES AND MANGE.**

COTTAGE HOME, Md. Jan. 18th, 1856.

To the Editors of the American Farmer:

Knowing your readiness to impart information, I will make a little inquiry, and if you, or any of your correspondents, can respond, it may possibly be as interesting to some others as myself.

I have heard that some persons build cisterns in and on their houses. I have a very good place in a building attached to my house for a cistern. We build all our cisterns of cement, in less exposed situations, but am afraid the expansion occasioned by freezing, in an exposed situation, would burst it. I have sometimes thought of Gutta Percha, but am not acquainted with the nature and cost of the article.

Before I close, I write two things yet; one is a certain cure for scratches on horses, and the other, to cure mange on pigs; I have tried both, and can vouch for their efficacy.

For scratches, wash the parts affected with beef brine, and three or four daily applications will effect a cure, even in the worst cases.

For mange, use the German Cattle Powders, put a half or a whole paper in the swill barrel, according to the size of the barrel, and a complete cure will be effected in two weeks, provided they are kept clean and dry.

Very respectfully, your friend,

DAVID RINEHART.

**NOTE.**—We are not aware that Gutta Percha has been or can be applied to this purpose. Its elastic qualities have been stretched however, to all sorts of uses. We suppose there is always more or less risk in having cisterns on or near the top of a house. We have known a new house, built for his own use by an intelligent master mechanic, very seriously damaged by the bursting of the water pipes.

**PREMIUM FOR CORN.**

The following statement was received by the Secretary of the State Society, to be presented to the Executive Committee at its session this month: To the President and Officers of the Maryland State Agricultural Society:

The competitor for the Premium, at the Maryland State Agricultural Exhibition of 1855, for the best yield from one acre of Corn, states, that the number of bushels of Corn the preceding year, (1854, see American Farmer of November, '54), was one hundred and fifteen bushels, one gallon and one quart. (115 bus. 1 gal. 1 qt.)

The land was ploughed about 11 inches deep, early in the Spring, after having been heavily manured broadcast with new rotted stable manure, night soil and wood-yard dirt. On the 8th day of May the land was run out with a large plough, in rows 4 feet apart, in the bottom of which superphosphate of lime, mixed with Peruvian guano in about the proportion of one part of the former to two parts of the latter, was dropped. The mixture was then covered with a light plough, and the rows again opened and the corn dropped, after being dampened with salt water and rolled in plaster of Paris. It was then covered with an ordinary harrow and rolled. As soon as the corn appeared above the earth it was given a top-dressing of superphosphate of lime at the rate of 200 lbs.

to the acre; and this was followed by a slight sprinkling of plaster of Paris. The corn was left to stand at about 11 inches apart in the rows. It was harrowed twice, ploughed once, and the plough was followed by the cultivator once, which is all the tillage the crop received.

G. W. P. SMITH.

Snow Hill, Md., Oct. 17, 1855.

**CERTIFICATES.**

We hereby certify that we believe the foregoing statement to be true; that we measured the aforesaid acre of land for G. W. P. Smith, from which the one hundred and fifteen bushels, one gallon and one quart were gathered; and that the measurement of the land and the gathering of the Corn were fairly performed.

GEORGE B. GRAY, (Practical Surveyor.)

EDWARD D. MARTIN.

The undersigned, practical farmers and neighbors to G. W. P. Smith, certify that we attended in person to the measurement of the corn raised by Mr. Smith on the measured acre of land, above referred to; and that the number of bushels, as stated by him to have been raised this season on said one acre of land, is correct.

JAMES S. LECOMPT. WILLIAM SERMAN.

Snow Hill, Worcester Co., Md., Oct., 1855.

**BALTIMORE MARKETS—FEB. 29.**

As stated elsewhere, there has been a considerable decline in all kinds of breadstuffs and provisions, during the past month, in consequence of the tenor of the news from Europe leaving but little doubt that the propositions for peace from the Allies have been accepted by Russia. To this, is also to be added the stagnation of business in consequence of the harbor being entirely closed now for two months, and no shipments being made during that period. It is expected, however, that the ice will be sufficiently cleared away, in two or three days, to enable us to resume active operations, when we have reason to believe that a more cheering prospect will be opened to the farmers, as all kinds of stocks, in the several seaports, have been pretty nearly exhausted during the cold weather.

Flour, Howard Street and City Mills, \$3.75a, with an active enquiry; Rye Flour, \$5; Corn Meal, \$4 for City Mills, \$3 per barrel for country meal—Wheat, offerings very light, sales of choice red at \$1.50, but may be quoted at 140a150c, for good, choice red, and 150a160 for good to prime white—Corn, sales of mixed 57a58, and yellow 59 by measurement—for prime yellow 60c, by weight, was offered, but it was held at 62; prime white Corn, 60a61c per bushel, weight—Rye, 95c for Pa., and 80a85 for Md.—Oats are dull, at 32a36c—Molasses, N. O. 45c—Rice 5a5½c—Sugars, very little in first hands, N. O. 38a9.25—Cloverseed 38.50a9, as in quality—Timothy seed, \$3.25a3.50, and Fair seed, \$1.80a1.85—Whiskey, Pa. 37c cash—Cattle, best \$3.25a5, on the hoof, equal to \$8.50a9.75 nett, and averaging \$4.50 gross; a few extra were sold at \$5.50 on the hoof—Hogs, \$3.50a9 per 100 lbs., and Sheep, \$4.50a6.25 per 100 lbs. gross—Hay, baled \$25a26, and loose \$20a23 per ton—Straw, 15a16 for rye, and 10a13 for wheat—Plaster, \$2.75a2.81 per ton for lump, and \$1.35a1.37 per bbl. for ground—Wool, unwashed, 19a21c, pulled 24a28, tubwashed 29a31, fleece wool, common to ½ blood, 29a33; ½ to ¾ blood, 31a35; ¾ blood 33a40; ¾ to full blood, 40a42, and extra 42a48—Tobacco, no receipts of consequence; Crop, Md. \$5a6, good \$6.50a7.50, and fine \$8a16; ground leaf, very common, \$3a4; Fair \$4.50a5.50; good and fine \$6a8; common seconds and tall ends 4a5.50, good seconds 6a7.

The Upper Marlboro', Prince George's county Gazette says that the present winter has been very unfavorable for stripping and packing Tobacco for market, in consequence of which there is scarcely any Tobacco ready for shipment, and adds: "It is now too late to attend to it, as the backwardness of the season for making beds in which to raise the plants, renders it impossible to devote any considerable time to the old crop. The spring shipments will therefore be small, and but little of the article will find its way to market until late in the summer. Those who have Tobacco in the hands of their agents in Baltimore will, we feel assured, do well to hold it at higher rates than are now prevailing."

P. S.—The steamer America is just in. Breadstuffs slightly lower—Cotton better—and money more stringent.

## WORK IN THE GARDEN.

### MARCH.

In ordinary years the work in the garden, in the South, commences weeks before the coming in of March. Whether they have so commenced this year, is a point that we cannot settle; but in the Middle States, during this month, we think, such operations—notwithstanding the severe winter that we have just passed through—may be undertaken as soon as the frost is out of the ground and the soil can be wrought advantageously. It is proper, then, to say to our readers, that they should prepare themselves to commence the labors of the Garden as soon, as from the absence of the frost, the soil can be properly worked. To appoint any particular day of the month, in a country like ours, where the seasons are so capricious, uncertain and variant, would afford but an indifferent rule of action, and could but lead to unfavorable results—to disappointments. But it may be very safely affirmed, that the right time to begin is when the frost is out of the ground, and the soil so warmed and dried as to be in a condition to be well worked, as when it is in that state it is susceptible of producing germination.

To such gentlemen, then, as have not already provided themselves with well appointed gardens, we say, now is the time to supply themselves with such deficiencies; for we hold it to be a manifest and culpable neglect on the part of every owner or occupant of a farm or plantation, not to have a well appointed and well cultivated garden. We are certain that there is no part of an estate of ten times its extent, that yields anything like the same quantity, or same value, in edibles, as does a garden that is well and judiciously cultivated. We have often heard the apology urged for not having a good garden, by the proprietor of an estate, that he could neither spare the labor or the manure from his field crops; but such apologies we always viewed as unconvincing and unsatisfactory; for we do hold it to be an imperative duty devolving upon every proprietor and tenant, to supply his family, and dependants, with all the varieties of vegetables—and believe too, that an enlightened economy would be consulted by his doing so, and comfort largely promoted thereby. Nor should he be satisfied at merely supplying them with vegetables: his ambition should still go farther. It should extend to the furnishing his garden with all the small fruits, as strawberries, raspberries, gooseberries, currants, grapes, as well as to its adornment with shrubbery and flowers; not omitting to have its borders and edgings well supplied with all the pot and medicinal herbs. A garden cannot be said to be well appointed, unless in its arrangement it combines utility and elegance. It must at once consult the gratifications of the appetite and the pleasures of the eye. While such a garden will carry delight and pleasure to the hearts of your wives and daughters, and inspire them with the feelings of laudable ambition and pride, increase the measure of their reverence and love for you, you will find that it will infuse into your own bosom an enhanced affection for your home, add to the value of your estate, and largely augment the respect and esteem of your neighbors and friends. Having thus freely conversed with you, let us point out some of the many things that ought to be attended to in the course of this month.

### CABBAGE—PLANTS IN GLASSES.

See that your gardener raises the glasses of your hot-beds containing Cabbage plants every fair day, to harden and inure the plants to the open air, the better to prepare them for transplantation as soon as the weather becomes mild and settled enough, which in ordinary seasons is from the middle to the 20th of the month in the middle States.

### PLANTING OUT CABBAGE PLANTS.

If you have been fortunate enough as to have raised Cabbage plants in hot-beds, under glass, make your arrangement to manure, dig up and pulverize your beds allotted for their reception, as soon as the weather becomes sufficiently settled and warm. Recollect that the cabbage is a hearty feeder, and therefore manure the ground with a liberal hand. If the manure be *barn-yard manure*, a covering of 3 or 4 inches in depth will be gratefully appropriated by the plants, while in product and size you will be amply remunerated for such generous feeding. If you intend to manure with *Peruvian guano*—and that is the only kind for garden culture that we would recommend—you should at least apply a quantity equal to 400 lbs. per acre. But let whatever manure that may be used, the bed should be top-dressed with a mixture composed of 5 parts *leached ashes*, 1 part *salt*, and 1 part *plaster*. In digging in the manure, the person should turn it in full spade deep, and thoroughly rake whenever he has 3 feet of spaded-up ground before him, to save the necessity of treading on it while raking.

The distance of plants apart should be governed by the variety. If the *small* kind, the plants may be from 2 to 2½ feet apart in the rows: if the *large* kind, not less than 3 feet. The rows for either large or small cabbages should stand 3 feet apart. If the plants be intended to be used as *coleworts* and not suffered to head, they may stand 18 inches in the row; or where intended to be used both as *coleworts* and as headed cabbage, the plants may be placed 12 inches apart, using every alternate plant for *coleworts*, and permitting the other to run into head.

### SOWING CABBAGE SEED IN BORDERS.

Those who have not provided plants in hot-beds may sow seeds of early and late Cabbages on a border, facing the south, from the 15th to the 20th of this month. Manure the part of the border selected heavily, dig in the manure *spade deep*, rake until thoroughly pulverized. Then spread on the surface an inch in depth of compost made of 6 parts rotten dung, 1 part ashes, and 1 part plaster; rake this thoroughly in with a heavy rake; then sow your seeds, designating the several seeds sown by marks, rake the seed lightly in and compress the earth lightly with the back of your spade or shovel, or by laying a plank on the border and standing on it.

### SOWING LETTUCE SEED—PLANTING OUT.

As soon as the weather is settled and the ground can be got in good order, prepare a part of your border facing the south, as recommended for cabbage seed, and sow different kinds of Lettuce seed. Any plants which may be of sufficient size, may be set out to head about the 20th of this month. Lettuce seed should be sown at intervals of two weeks apart, throughout the season. By such arrangement a continuous supply of crisp heads may be secured.

## TOMATOES—EGG-PLANTS—RED PEPPERS.

Sow seeds of each of these in pots or boxes, place the boxes in warmly southern exposed windows to produce plants to be set out when all danger from frosts are over, for early crops. If placed in pots, an oyster shell or piece of broken crockery should be put over the hole in the bottom to ensure drainage; as stagnant moisture is apt to injure, if not destroy the roots of the plants. If a box be used, bore a hole in the bottom about 1 inch, or three-fourths of an inch in diameter, and cover as recommended for the pots. The earth used to fill the pots or boxes, to produce the plants, should be a rich mould fertilized with organic manure of some kind, so as to secure an early and vigorous growth of the plants. The fertilization of the soil may be effected by dissolving half an ounce of guano in water, to each large sized pot, or box, if the latter does not contain more than 200 square inches. The solution to be poured over the surface—or the same effect may be produced by making a decoction of 7 parts fresh horse-dung and 1 part soot, and watering three or four times with it.

## PLANTING OUT CABBAGES AND ROOTS FOR SEEDING.

As soon as the weather gets sufficiently open, mild and settled for such operation, set out *Cabbages, Beets, Turnips, Parsnips, Carrots, Oyster plants, &c.*, for seed.

No two kinds of cabbages or turnips should be placed within some hundred yards of each other. This precaution is necessary to prevent mixture and deterioration of sorts.

Plant the seed cabbages in rows 4 feet apart, 18 inches in the rows, and up to the heads in the ground.

No two kinds of turnips should be placed nearer than recommended for the cabbages.

For *Cabbages, Beets, Parsnips and Carrots*, the rows should be four feet apart; the roots from 10 to 12 inches apart in the rows.

The ground must be manured and thoroughly pulverized, before the cabbages, roots, &c., are set out for seed. The best of each should be selected to raise seed from.

## PLANTING EARLY POTATOES.

As soon as the weather is open and the frost is entirely out of the ground, is the time to prepare your ground for, and to plant potatoes for an early crop. Select the driest and best exposed bed in your garden,—a light, sandy mould, if possible. Manure it broadcast, with about half the manure you intend to apply, dig that in to the depth of the spade, rake finely; then lay off rows 4 inches deep, 3 feet apart; then strew the residue of the manure along the rows, place the sets 10 inches apart in the rows, and cover. Then give the bed a broadcast dressing of a mixture comprised of 6 parts ashes, 1 part plaster and 1 part salt; taking care to give the drills a full dusting. The vines, when they first come up, should receive another dusting, as also at each working, and once a week after being laid by, until the vines go out of bloom. As to the working of the potatoes, it is sufficient to say that they must be kept clean of weeds and grass and the earth open from the time that the plants are 3 or 4 inches high until laid by. The dusting with the prescribed mixture must be done early in the morning, while the vines are wet, so that portions of the mixture may adhere to them.

With regard to the *sets*, they should be so cut as to have 2 eyes to each. As each set is cut it should

have the wounded part rubbed in plaster or ashes, and put away in a cool, dry place, where they would not be subject to freezing. If cut two or three days before being planted, so much the better.

## EARLY TURNIPS.

We fear there are but few farmers who think of cultivating a bed of early turnips in their gardens, and yet no garden should be without a bed of a root at once so healthful and acceptable to the human palate.

If, then, you have a bed of light sandy-loam, of 40 or 20 feet, prepare a compost at once of 20 bushels of fine rich mould, 20 bushels of rotten horse-dung, 1 bushel of bone-dust, 2 quarts of plaster, 2 bushels of ashes and 2 quarts of salt; mix the whole thoroughly together, throw it into pile, let it remain two or three weeks, when it must be shoveled over again. It is then ready to be applied to the bed; apply and dig in one-half, the other half to be applied as a top-dressing and raked in. The manure being raked in, then sow the seed, lightly rake them in, and compress the top of the bed with the back of the shovel. Prepare a mixture of 5 parts ashes, 1 part plaster, 1 part salt and 1 part soot; have it ready on hand, and as soon as the turnip plants appear, give the bed a dusting with the mixture early in the morning, and repeat it each morning early until the plants get into the rough leaf.

When the plants have bulbs thin the plants out so as to stand six or eight inches apart, and clean out the weeds. Two workings more will be sufficient.

*Kind of Turnip seed to sow.*—The *Early Dutch* is the earliest variety and best adapted to early culture.

*Time of sowing.*—As soon as the frost is out of the ground and the soil warm enough to ensure the germination of the seed, is the time to sow the seed.

## SALSIFY, OR OYSTER PLANT.

Prepare a bed of sandy loam by manuring with well rotted dung, digging spade deep and thoroughly pulverizing with the rake; then stretch your garden line and with the corner of the hoe draw drills 12 inches apart, 2 inches in depth; along these drills sow the seed thinly, cover with the rake and compress the earth with its back. When the plants come up give them a dusting of a mixture comprised of 7 parts ashes and 1 part plaster. In the beginning of May thin out the plants to stand 6 inches asunder in the rows. Work them two or three times to keep the plants clear of weeds and grass and the earth, dust them as above each time—will be all that is necessary to ensure a good crop.

*Time of sowing the Oyster plant seed.*—When the ground is entirely free from frost is the proper time to sow the seed.

## ARTICHOKES.

The seed of this vegetable should be sown as early this month as from the absence of frost the ground can be put in order.

## HORSE RADISH.

Early this month select a moist bed of deep friable loam; manure it heavily, dig it spade deep, rake finely, and set it in this excellent, healthful root, in rows 12 inches apart—sets 6 inches asunder.

**RHUBARB, OR PIE PLANT.**

As early this month as the ground can be put in first rate order, prepare a spot, by manuring liberally, digging spade deep and raking finely; then set out a few dozen plants of this excellent vegetable production. It is excellent for pies, and is said to be as healthful as it is palatable.

**FRUIT TREES OF ALL KINDS, SHRUBBERY, GRAPE VINES, &c.**

Fruit trees of all kinds, Shrubbery, Raspberries, Gooseberries, Currants, Grape vines, &c., should be set out as early this month as, from the absence of the frost, the ground can be thoroughly prepared for them. Now, if you should perchance have none of these in your garden, make up your mind at once that the duty of planting some of each is an imperative obligation, the performance of which you cannot further delay without doing injustice to your family and to your own sense of right.

**STRAWBERRIES.**

As early as possible this month give your strawberry bed a dressing of well rotted manure; work it in lightly, taking care not to injure the vines in doing so; then lay long straw between the alleys, confine the straw with wooden forks to prevent its being blown away. If the weather should be dry when the vines are in bloom, use the watering pot freely between the rows, holding the nozzle of the watering pot well down to the ground, so as to avoid touching the flowers, lest the farina be washed away from the flowers. By adopting this plan of treatment, you will secure yourself an abundant crop of this most luscious fruit.

If, however, you have not a bed of strawberries in your garden, supply one forthwith. He that has a dairy abounding in cream and milk should, by all the considerations which should actuate a good husband and father, provide a fruit at once so delicious and healthful for his family.

**ASPARAGUS BEDS.**

As early as possible this month dress your Asparagus bed with a compost made of 7 parts rotten dung and 1 part ashes. Incorporate these well together; then spread the compost about 2 inches deep between the alleys and fork it in, taking especial care not to injure the crowns of the plants. This done, then rake smooth and sow over the bed, at the rate of 1 gallon of seed to every 100 square feet.

**SIBERIAN SPROUTS.**

Prepare a bed as we recommended for early turnips, and sow a bed with the seeds of this excellent variety of sprouts. Sow them thinly.

**SOWING ONION SEED.**

Prepare a sandy-loam bed, by manuring, digging and raking, and drill in a bed of Onion seed, or plant onion sets. The drills should be 12 inches apart, the plants 4 inches asunder.

**SOWING CELERY SEED.**

Prepare a bed as early as possible this month, and sow Celery seed.

**CARROTS, PARSNIPS AND BEETS.**

For early use should be drilled in as early this month as the ground can be got ready.

**SMALL SALLADING.**

Sow all kinds of small sallading as early this month as the ground can be got in first rate order, and the sowings should be repeated every two weeks throughout the season.

**SPINACH.**

As soon as the ground can be worked advantageously drill in a few rows of this delicious and healthy vegetable. Every two weeks, for some months, put in a few drills more.

**SEED ONIONS.**

Set out your Onions for seed as early this month as the ground can be put in good order.

**FIG TREES.**

These should be planted as early this month as possible. They can be propagated also from cuttings.

**EARLY PEAS.**

Plant your Peas as early as the ground can be put in good order.

**RADISHES.**

Towards the middle of the month sow Radish seed, provided the frost is out of the ground and the weather mild and settled. Repeat the sowing every two weeks throughout the season.

**BEANS.**

As soon as the frost is out of the ground and the weather settled, plant rows of *Lisben*, *Windsor* and *Mazagan* Beans.

**POT AND MEDICINAL HERBS.**

The seeds and roots of these should be sown and planted as soon as the frost is gone and the weather settled. Every garden should have in it *Sage*, *Thyme*, *Hysop*, *Parsley*, *Rue*, *Tansy*, *Spear mint*, *Peppermint*, *Pot-marjoram*, *Chamomile*, *Sweet marjoram*, *Chives*, *Shallots*, *Balsam*, *Celandine*, *La vender*, *Summer Savory*, *Hoarhound*, *Garlic*.

Extract from the Annual Message of Gov. Clark to the Legislature of New York:

**Agriculture.**—The Legislature of 1853 granted a charter for an Agricultural College to be connected with an experimental farm. Applications will be made to you to aid the endowment of this institution with money from the public treasury. The great value to a State of intelligent agriculture, and the importance of improving our knowledge and practice of this most dignified art, with the aids of modern science applicable to it, induce me to recommend you to grant that application, and with liberal measure. The diminution of the cost of raising the food of the people of this State, and the increase of the productiveness of its farms, are considerations upon which it is not necessary to dwell. Economical farming in New York seems to require Governmental aid in making a knowledge of chemistry as applied to agriculture cheaply accessible to all who till the soil. Arbitrary Governments in Europe have by public instructions popularized this knowledge. Republican New York surely can afford to do so.

**GUANO ON THE FLORIDA COAST.**—The Key of the Gulf says:—"Several gentlemen who have been engaged during the greater part of the present year in a scientific and careful examination of the Florida coasts and keys, with the view of discovering guano and kindred fertilizing agents, have recently returned north, prepared, as we learn, to remove large quantities of the former to northern latitudes. Though the character of our climate precludes the presumption that ammonia, so largely pervading the Ichabo and Lobos guano, can be found to a valuable extent, mingling with the fertilizing agents of our islands, we know that the deposits of birds and the phosphate of lime, in other forms, abound upon nearly all the keys between the outer chain and the main land."

## AMERICAN FARMER.

Baltimore, March 1, 1858.

### TERMS OF THE AMERICAN FARMER.

Per Annum, \$1 in advance—6 copies for \$5—13 copies for \$10—30 copies for \$20.

ADVERTISEMENTS.—For 1 square of 8 lines, for each insertion, \$1—1 square per annum, \$10—larger advertisements in proportion—for a page, \$100 per annum; a single insertion, \$15, and \$12 50 for each subsequent insertion, not exceeding five.

Address,  
S. SANDS & WOTHINGTON,

Publishers of the "American Farmer"  
At the State Agricultural Society's Rooms, 138 Baltimore-st.  
Over the "American Office," 5th door from North-st.

### Maryland State Agricultural Society.

A meeting of the Executive Committee of the Maryland State Agricultural Society will be held on TUESDAY, the 4th March inst. at 10 o'clock, A. M.,

By order of  
JAS. T. EARLE, President,

SAM'L. SANDS, Secretary.

### PEACE OR WAR—PRICE OF BREADSTUFFS.

The advices received from Europe during the past month, leave but little doubt that the terms which had been dictated by France and England to the Czar of Russia, for the cessation of hostilities, have been acceded to by the latter. This is contrary to all calculations which had been made upon the subject, and, we have no doubt from the intimations of the press of that country, one at least of the allied powers (England) is much disappointed and chagrined at the result. It is a triumph of the French Emperor, and he alone, of all the powers directly engaged in the contest, is entirely satisfied. He enjoys whatever glory may have been gained by the war, for it is very evident that whatever success has been attained by the allied armies, is due to the French arms. The whole war has been a series of blunders, and shows an inefficiency in the staff of the English army, of which the people of that country are evidently most heartily ashamed—though the proverbial bravery of her troops of the line has been ably sustained. Smarting under the stigma thus thrown upon her military fame, the British government at an enormous expense has been engaged during the winter in fitting out a fleet, which, should it be put in requisition, would be the most powerful which has ever put to sea, and strong hopes were entertained that in the coming campaign, she would make amends for her wounded honor in the two last. It is from this motive, National Pride, that England would have preferred continuing the war for another year—but this is not to the interest of the Frenchman. He wished to humble Russia, not to destroy her power, which hereafter he may find it convenient to use against his present ally—he has shown himself more than a match for English diplomacy, and has also showed his superiority in the management of the war. Poor Turkey is left

in a more enfeebled state than ever, and her European territory will eventually fall into the hands of France, whose army now controls Constantinople, as another has done for years, the city of Rome. Russia, in accepting the terms offered her, shows that she has been humbled indeed, otherwise she would not have submitted as she has done—yet it is no doubt for her future interest that she succumbs, for the last vestige of her marine would, in another campaign, have been destroyed—this latter consideration, however, would not have brought her to accept the conditions imposed upon her, had she not found, that her present enemies were not the only ones with whom she would have to contend on the renewal of hostilities. The allies had determined on changing the seat of the war; Sweden had already obligated herself to join them—and Austria and Prussia, and the smaller German States, now find that if the contest is carried on, on their borders, it would be impossible for them to remain neutral, and that they would be forced into the contest—and although their feelings are in favor of Russia, they are aware that the allies, with organized bands of refugees from the neutral nations at their command, rendered it necessary for them to avoid another contest, in which their own internal quarrels would be resumed; then if forced to take up arms, they would be compelled to turn them against their neighbor and friend—for Russia had shown herself a friend indeed, in the time of the utmost need, of these German princes. These latter, therefore, have demanded of Russia, that she accept the terms proposed, to avoid a general war, and Austria and probably other powers, have given her the assurance, that she would dissolve all intercourse with her, in case she refused to accede to their demand. Another cause, operated on Russia—her finances have become exhausted, and she has found it impossible to negotiate a new loan for the conduct of the war.

These are the aspects of the case at present—Paris has been decided on, as the place of meeting to arrange the details of the treaty, the general terms having been agreed on—but if it is in the power of England, without giving too much offence to her ally, to throw obstacles in the way, there is no doubt she will do it—this, however, we do not think will be permitted, and a peace will, we think, be patched up for the present.

The effect, on our market, of this state of things, has been to depress the price of breadstuffs, which have considerably declined during the past month, and although of course, we cannot expect them to rally to the point at which they had lately reached, still the demand for home consumption, and on European account, which must be continued for some time, will cause a continuation of very remunerating prices to the farmer. The protracted cold weather has stopped many of the country

mills, and the navigation in all the Atlantic seaports having been closed for nearly two months, but little business has been done. On the resumption of business in the Spring, we hope an activity will prevail, which will call for supplies of grain and other produce, equal to the ability to supply it.

#### STATE CHEMIST'S FIFTH REPORT.

We received, very late in the month, a copy of the State Chemist's Report to the Legislature—and have only time and space to make a few remarks in relation to it. It is not inaptly styled by a morning paper, a "*rehash* of his previous reports"—not a small portion of which is taken up with laudation of the office and the incumbent—with flings at sundry "professed scientific" men, insinuations against dealers in or manufacturers of manures, and with expectations of being "subjected to the abuse of knaves," for his determination to observe the "spirit of the law" under which he holds his appointment.

In the course of the report, page 58, he says he will now proceed to "give a description of the counties visited" by him since his last report, and devotes sundry pages to matters connected with Frederick County, embracing analysis of soils, its topography, &c., and then proceeds to give some details under the head of "Calvert County," without intimating when he had visited that county. We think the people of Carroll, Baltimore and Harford counties, and Baltimore city, may begin at last to give up all expectations of being honored with the services of the State Chemist, as we are to take it for granted that their gubernatorial district has long enough received his attention, as he has begun anew on the South-Western district.

But our object especially, in noticing the report at all at this time, is to call attention to the claims he puts forth to the continued confidence of the public, towards himself and his office, for sundry services rendered, which, had we time and space, and there was a necessity for it, we could very clearly show are predicated upon the labors and vigilance of others, whose "thunder" has been appropriated by the State Chemist to his own glorification.

A brief review of this Report, from "*A Plain Farmer*," will be found on another page.

**INSPECTION OF GUANO.**—The Committee on Agriculture, in the House of Delegates, to whom was referred the subject of abolishing the office of Inspector of Guano, has reported against any change in the law, but suggest "that the month and year in which it is imported, should be marked by the Inspector, upon every package of Peruvian Guano, thus enabling the farmer to learn the age of the particular lot he is purchasing." This can do no harm, but as the business has heretofore been managed, will not be likely to do any good—still we

must hope for the best, and that some change for the better will ere long take place. We were formerly disposed to favor the abolishment of the inspection, but the experience of the last year or two, induces us to believe that it is better for the farming interest to continue it. Mr. Davis, the Chairman of the Committee, made a very able and interesting report on the subject, which we regret our inability to publish in this number.

**DR. KANE'S ARCTIC EXPLORATIONS.**—The narrative of this expedition by Dr. Kane will be published about the first of May by Messrs. Childs and Peterson of Philadelphia, in two handsome octavo vols., of about 900 pages, illustrated by twenty fine steel engravings, including the portraits of Dr. Kane and Mr. Grinnel, and near 300 other illustrations from drawings made by Dr. Kane. The work will be printed upon superior paper, from new and beautiful bold-faced type made expressly for the purpose. The estimated expense of the work will be upwards of \$20,000, and will be issued in a style worthy of its distinguished author and enterprising publishers, at the low price of \$5 for the entire work, payable on delivery. A glance at the list of subscribers already obtained in Baltimore, shows the estimation in which Dr. Kane is held by the elite of this city, and while it is of immense advantage with the publishers to be able to reimburse themselves as soon as the book shall have been issued, subscribers are benefitted by being first served, with first impressions, which in a work so fully illustrated is a matter of no small importance.

**AGRICULTURAL COLLEGE.**—The bill for the establishment of an Agricultural College and Experimental Farm, has passed the Senate of Md. with great unanimity, only two members of that body voting against it. There were several amendments made to the bill as originally reported, which are highly satisfactory to its friends. It is now before the House, where we hope it will pass with an equal degree of unanimity—when we will publish the bill as finally adopted—and we hope to be able to lay before our readers at the same time, the very able speech of Col. Sothoron, Chairman of the Committee in the Senate, on its introduction into that body.

**HON. J. A. PEARCE, U. S. S.**, has our thanks for a copy of the Reports of Explorations and Surveys to ascertain the most practicable and economical route for a railroad from the Mississippi river to the Pacific Ocean, under the direction of the Secretary of War, in 1853-4. It is a large quarto vol. of 650 pages, and contains descriptions of the country examined, and a large amount of interesting information and descriptions of the country surveyed.

**THE TOBACCO INTEREST.**—It is a strange fact, that so important an interest as that of Tobacco is, in this country, should have been suffered to have such restrictions placed upon its introduction into foreign countries. The duties upon it are enormous, and although now and then an effort has been made by our planters to induce our government to take hold of the subject with energy, yet each successive administration comes in and goes out again, without apparently making an effort to remedy the evil complained of. The Legislature of Kentucky has now taken hold of the subject, and have adopted resolutions, complaining, that, notwithstanding the importance of the Tobacco market to this country, it has been overlooked in our commercial treaties with other nations, and that the duties imposed upon this article are excessive and not founded in justice. They urge that this great staple shall be placed in future treaties on the same footing as other great agricultural interests, and that their representatives in Congress shall seek to induce the Government to use every means to procure a more liberal policy in this regard. They also bring this matter before the notice of the Southern Commercial Convention, and recommend their action in its favor. The Governor of Kentucky is charged with forwarding these resolutions to the President, the Representatives, and the Convention. The action of the Legislature in this matter is praiseworthy, and the subject of that action is one which should command attention, as it is of great importance to a very large number of agriculturists.

#### PEAT COMPOST AND OTHER MANURES.

Our correspondent "Well Wisher," in our February Number, makes enquiry as to the value and treatment of peat or swamp-muck, which is frequently deposited in large quantities, at the heads of our creeks, and in other low grounds. As to its value, Professor Dana, a practical Chemist, (not a farmer,) rates it as equal in fertilizing qualities to cow-dung, after being composted with about 24 bushels of leached ashes to the cord, or about 10 bushels of ashes to a common ox-cart load of 40 bushels. Many practical farmers of high authority, north and east of us recommend it highly, estimating its value from their own experience. We are not at present possessed of any careful experiments, testing its value in practice, as compared with other manures. The writer has used it to some extent himself some years back, and has no doubt that it has much value when properly prepared in compost.

It should be always thrown out and exposed to the action of a winter's frost, previous to use. Professor Dana recommends that it be treated with ashes as stated above. Professor Mapes of the Working Farmer, recommends composting it with lime slacked with brine and then passing it through

the stables to be used as an absorbent, and mixed with the droppings of Horses, Cattle, &c. Simply composting it with stable and other manures, may perhaps answer every desired object.

Mr. Phinney, near Boston, an intelligent and extensive experimenter, thought that mixed in the proportion of two parts, with one of clear stable manure, the compost was equal to three of stable manure. The composting is essential, the substance containing a large per centage of insoluble matters which are brought into action, or made available by the action of lime, ashes, or the ammonia contained in stable manure.

After all, the due preparation and application of such material for manure, is a question of cost which every one must determine for himself, taking into consideration locality, cost of other manures, price of labor, &c. It is this last named item, its high price, and increasing difficulty of procuring it, which must operate as a bar to the extended use of compost and other bulky manures on the Farm. Our lands are so out of proportion to our means of working them; lands are so cheap, and labor so high, that the manufacturing of manures upon the farm in sufficient quantity to restore or even to preserve its fertility, is out of the question. The grand illustration of this truth is exhibited in the exhaustion and abandonment of our Atlantic States, and the rapid filling up of the Western and South Western. We go away and buy new lands, sooner than renew the old.

Guano and other portable manures, while they involve a serious outlay in money, require no additional outlay for labor, and do not interfere with the routine of ordinary Farming operations.—These circumstances, with the immediate and remarkable effects they produce, commend them peculiarly to our use. They supply in the form most suitable to our circumstances, the grand want in our system of culture, a sufficiency of manuring material to ensure a profitable return of our labor.

We would still however have our readers bear in mind, that the only reliable and available method, and at the same time the most economical method, of permanent improvement of our Farming lands generally, is in the use of ameliorating plants. Let them use what fertilizers they can or will, to bring their lands up to the point of yielding a luxuriant growth of clover. When it will do that, the game is in their own hands. This plant is at the head of ameliorators. Next to it is the field pea, which will begin the work of improvement at a lower point of barrenness, than that at which the clover is available. In the use of these plants, with the more extended cultivation of the grasses proper, is our best and only hope of a lasting improvement of our lands.

THE RURAL AMERICAN is a new weekly quarto published at Clinton, Oneida Co., N. Y., by T. B. Miner. Its motto is "Preserve the Union." Its matter select and judicious, and from its first number, we anticipate a valuable auxiliary in the cause of agricultural improvement.

## THOROUGH TILLAGE—CULTIVATION OF CORN.

It is a remarkable fact, that a man who strenuously advocated the extraordinary heresy, that manuring is not only useless, but pernicious, should have any fame at all among farmers; yet Jethro Tull has been dead more than a century, and his fame is yet spreading and growing, as one of the most enlightened, intelligent and progressive practical farmers of the day. His fame rests mainly on his sagacious observations and careful experiments upon the *thorough stirring and cultivation* of the soil, and it is well deserved. With singular sagacity, his practical understanding saw the necessity, which science after the lapse of a century, is beginning to explain, of opening up the minutest particles of the soil, to the operation and influence of the atmosphere. With not the first idea of nitrogen, oxygen, or carbonic acid; of ammonia in the air, or phosphates and silicates, soluble or insoluble, in the earth, he seized and held fast the great fact that the thorough breaking up and separation of the particles which compose the soil, is the primary condition of fruitfulness. It has been so from the first, and will so continue to the end. "I will dig about it, and dung it," was the reply of the prudent cultivator to his master, who ordered him to cut down the unfruitful tree, and "digging and dunging," are at this day the comprehensive vocabulary of the culturist, and the grand conditions of fruitfulness. While we do not hold with Tull, that "dunging" is either pernicious or unnecessary, yet we do think that the practice of the present day gives it an undue precedence over "digging." In the former, we furnish to the earth a portion of the food of plants; in the latter process we put the earth in that condition, in which alone it can be the medium of appropriating this food to the use of plants—but more than this, we bring out and make available to the same purpose, hidden stores and treasures of plant-food which have been locked up in its recesses, and make it capable of imbibing rich draughts from the air, the dew and the rains. We do not object to the large amount of money spent in the purchase of manures, but we do marvel at the carelessness, which in imperfect working of the soil loses half the value of these manures, and an equal value perhaps within the soil which it fails to develop.

While a man is at any rate at the expense of a team, driver, and plough, how very small is the difference in cost between very good and very bad ploughing. A little more care in the ploughman, a little more watchfulness in the master; a team somewhat stronger, and care to get the best plough. With only this difference, what an amount of bad ploughing is done, how little good ploughing is done. And when the master makes all due provision, how much depends upon the ploughman; how much is "cut and covered," how much left un-

broken from the careless or accidental running out of the plough; how many rising grounds and knolls just skimmed, and sods half turned, to be dragged back by the harrow, and when the so called breaking up is completed, a mere scratching with a harrow, satisfies the conscience of the master and the eye of an "outsider," that the work of preparing for a crop is done.

The first operation upon a turf field is the thorough, perfect turning over of the sod. This, except on very light lands, requires a team of three horses of medium size, and in good condition to turn to the requisite depth of at least eight inches. The most perfect cultivation requires, we have no doubt, a subsoil plough, breaking up, but not throwing out the subsoil, to the depth of 15 to 18 inches. It is an expensive process, however, requiring double force of team to do the work of ploughing, and will not pay under ordinary circumstances. The sod once turned down, should stay down for the season, and not torn or dragged up again by the markings and crossings, for planting, or by any other operation. Immediately after the plough, within an hour if it can be done, certainly within the day, let a heavy roller follow, to pack the inverted sods, and the harrow to give the fresh turned earth the tilth, which it will never take so well after being dried in the sun. The experienced gardener knows this, and his spading does not exceed a rod of ground before it is thoroughly raked. There is no manner of necessity for ploughing the whole field of thirty or fifty acres before the harrowing is begun, and no practical difficulty in having all the operations of ploughing, rolling and harrowing, carried on together and completed, to the extent of the ploughing, before leaving the field. These primary operations being concluded, the after tillage consists in such use of the harrow, cultivator, or plough, as will most thoroughly and perfectly drag, tear, break to pieces and pulverize every cubic inch of earth on top of the inverted sod; and this should be done as much as circumstances will allow before the crop is planted, or as early as possible afterwards. The most perfect preparation for a crop, is that of a well managed Tobacco field. The first operations of ploughing and harrowing, are done early in the season. Before the planting time, another complete surface ploughing is given, without disturbing the sod. Immediately before planting, the ground is checkered into squares of three feet, thus breaking again nearly a fourth of the surface; then follows the hoe, chopping most thoroughly the centres of the squares and drawing to them the earth from the edges to make the hill. In the tobacco field, this careful preparation of the ground is essential to secure a "stand" of the tender plants. We should be glad, if some of our readers would try the effect of such perfect preparation on an acre or two of their corn fields, and note the result.

It is objected to the early harrowing which we recommend, that it encourages the early growth of grass and weeds, and that the ground will get grassy, before we are prepared to work it. This is an additional argument in its favor. If corn is the crop for instance, let him who is disposed to put off to the latest possible day his surface cultivation, lay upon himself the necessity of doing it early. There is no greater mistake than that of postponing every working of the corn field until the appearance of grass makes it necessary to have it done. Keep ahead of the grass: anticipate it. Or, rather, work not with reference to the grass, but with reference to the age and condition of your crop. The working of the corn should be thorough, quick and early. The stirring and disturbing of the earth and cutting of the roots tend to retard and hold back the plant from a too rapid development, and prevents an overgrowth of fodder. It is serviceable in this respect, as well as in pulverizing the surface soil and destroying grass. But when the plant approaches the period of bearing, it should have full time to recover its perfect vigor, and be allowed to send its thousand roots into the well tilled soil to gather food for the ears it is about to bear, and nourish to maturity. No implement of any sort should come h'side of the corn field within ten days of the time of "tasseling." And when the work has been well and faithfully done, up to this time, there will be no excuse for it. Let the miserable necessity of hurrying through harvest because the corn field is "suffering" be done away with. By planting early and working in accordance with these suggestions, as a general rule, corn may be "laid by" at harvest.

#### A DAILY AGRICULTURAL PAPER.

We give place with pleasure, to the communication of Mr. Calvert on the subject of a daily agricultural paper, and invite our readers to the consideration and discussion of such an enterprise. We desire by all possible means to have the minds of the farming community stirred up to a sense of their interests and their duties, and such a discussion will have that tendency. No one can be more impressed than ourselves, with the necessity and value of the press to the agricultural community. It has been matter of surprise to us, that leading men have given the subject so little attention. What will avail all their great efforts and labors in behalf of improvement, until the mind of the public is prepared to "back them up?" And how is the adult mind to be reached, except through the press devoted to their interests? We do sincerely think that the first step in their duty as improvers, is to induce the agricultural community, generally, to read and to sustain papers honestly devoted to their interests.

**ADVERTISEMENTS—LOOK AT THEM.**—We received a few days since, a letter from a subscriber in Missouri, enclosing his subscription for the *American Farmer*, in which he remarked, that although our modes of cultivation were very different from what is suitable for the rich bottoms of Missouri, still the advertisements which appear in our pages, more than repays for the subscription. Baltimore is the head quarters of everything useful for the Farmer and Planter; we have probably more extensive and a larger number of Manufactories of Agricultural Implements than is to be found in any State in the Union, and unsurpassed for their excellence of workmanship, and generally of their material—it is also the entrepot for every description of manures, and the amount sold in this city, far exceeds that of any other in the United States. We believe our pages afford more information upon such subjects than any other Journal of a similar character published; and the value of the custom secured by its instrumentality, renders it a favorite means to manufacturers and others, of offering their commodities to the Agricultural world. Although our subscription list includes all the States and Territories of the Union, and a sprinkling in distant hemispheres, yet the great bulk of our readers is comprised in the Middle, Southern and South-Western States. An advertiser in a distant State, assures us, that although he advertises in many papers, yet the result of his experiment in advertising in the *American Farmer*, has been worth to him twice as much as that of any other paper which he has tried.

**EXPENSES OF THE OFFICE OF STATE CHEMIST.**—The Treasurer of the State, in response to a call from the House of Delegates, has reported the following as the expenses of the office of State Chemist, since its establishment;

Salary of State Chemist,	\$14,408.49.
Do of his Assistant,	1,780.54.
For Laboratory and Chemicals,	1,550.00.
For Printing Reports,	2,427.75.

\$20,166.78.

\* This charge for printing, includes only for two reports, the 3d and 4th, which by the supplemental act, published in our January number, the State Chemist was authorized to have printed, at an expense not exceeding 10 cents per copy. The 1st, 2d and 5th reports, are provided for in the item for printing in the general accounts of the Legislature, and are among the vouchers of the Committee of Claims, of the Treasurer. Each of these three reports will, we have good reason to believe, have cost the State twice the amount paid for each of the two paid directly by the Treasurer, and will, with the postage on their distribution, which is also paid by the State, increase the total amount that this office has cost the people to the sum indicated in our expose, viz. from 35 to \$30,000. The 5th report alone just printed, will cost the State \$3,520, besides postage, if the charge is the same as for the 1st and 2d, viz: 22 cents per copy.

**IVERSON GRASS SEED.**—The editor of the Valley Farmer, asks us if any of this seed can be procured in Maryland? We have none, but it is probable, that among the large number who obtained seed last year, there may be some who may have seed for sale—though we are not advised of the fact.

**METEOROLOGY.**—We are glad to see from the following report that Professor Henry of the Smithsonian Institute, and Judge Mason of the Patent Office, have made arrangements for prosecuting meteorological researches under the direction of the head of the Patent Office, which will be published in the Patent Office agricultural reports. We trust however, that this arrangement will not interfere with the plan of Lieut. Maury, or prevent the appropriation asked from Congress to enable him to carry out his suggestions. The farmers are indebted to this gentleman for bringing the subject of meteorology in its bearing upon agriculture, prominently into public notice, and especially desire to "see him through," in his laudable efforts in this behalf.

**Agricultural Division of the Patent Office.**—*Meteorology applied to Agriculture.*—By a circular and a series of blanks, we perceive that an arrangement has been made between Professor Henry and Judge Mason by which the system of meteorological observations heretofore conducted by the Smithsonian Institution will hereafter be executed under the direction of the Patent Office, the results of which are to be embodied in the agricultural reports.

The points to be investigated are the conditions of the atmosphere by the barometer, thermometer, hygrometer, clouds, wind, rain, and snow, on each three times a day; the time of occurrence and the direction of thunder-storms; time of occurrence and direction from the observer of lightning at a distance, and its character, whether zigzagged, forked, or diffused; objects stricken by lightning—as trees, buildings, and the like; time of occurrence, width, and direction apart, and effects of tornadoes, and whether attended by electricity and hail; time of occurrence, direction, and width apart, and amount of injury of hail-storms, with the size and quantity of stones; time of the appearance and disappearance of the aurora borealis, the time of the formation of arch, beams, and corona, and whether there is a dark cloud below the arch; time of occurrence and direction of meteors, shooting stars, solar and lunar halos, parhelia, and paraselanes; time of early and late frosts; depth of ground frozen in feet and inches; disappearance of frost from the ground; time of closing and opening of rivers, lakes, canals, and streams, and their extreme rise and fall; temperature of wells and springs, at least once each season; time of occurrence, direction of impulse, number of shocks, and effects of earthquakes.

In respect to the phenomena of animals, plants, and trees, the general period of leafing, flowering, maturity, and fall of the leaf of the almond, peach, cherry, apricot, plum, apple, quince, pear, currant, gooseberry, red-flowered maple, dogwood, strawberry, and raspberry; flight northward and southward of wild geese; first and last notes of the whip-poor-will; first and last appearance of the barn swallow, sturgeon, salmon, shad, herring, and the fire-fly.

#### RELATIVE WEIGHT OF GRAIN AND COB OF CORN.

The following accurate comparison of two fine ears of yellow corn, handed us by a friend, is worthy of note.

No. 1, weighing 16 oz.—1144 grains weighed 14 oz. Cob, 4 oz.

No. 2, weighing 18 oz.—820 grains weighed 15½ oz. Cob, 2½ oz.

Both ears had been thoroughly dried, and while one contained 300 grains more than the other and weighed precisely the same, the weight of the grain was about 77½ per cent. of the whole, the weight of the cob 22½ per cent.; while the weight of grain of the other was 86 per cent. of the whole, and that of the cob 14 per cent. In other words, the cob weighing 2½ oz. held 15½ oz. of grains, while that weighing 4 oz. held but 14 oz. of grains.

The grain of this corn (we mean the best ear) is as fine a specimen of yellow gourd seed as we ever saw. Our friend, whose crop is ten to twelve barrels per acre, thinks that his land will produce two barrels more per acre of this yellow corn than of the most productive white corn. We believe the yellow is usually more productive, and worth more per bushel in market. Why is so much white grown by those who make to sell?

The same gentleman notes that he stored about 400 bushels of wheat soon after harvest, which after remaining in store some six months, lost about 10 per cent. by measurement, but gained about 6 per cent. by weight, per bushel.

**UNIVERSAL AGRICULTURAL EXHIBITION IN PARIS.**—The Vice Consul of France, for Baltimore, gives notice to the Farmers and Agriculturists of Maryland, that a universal exhibition of breeding cattle, implements, and French and Foreign agricultural products will open in Paris, on the 23d of May next, and continue open till the 7th June, to be reopened on the 22d May, 1857, and close on the 6th of June following.

Premiums, and gold and silver medals will be distributed to all cattle, tools and products adjudged to deserve them. Foreign animals, tools and products, sent to the exhibition, will be transported gratis from the frontier; all necessary expenses during the exhibition borne by the French Government.

Notice of intention to offer any thing for exhibition, must be communicated to the Vice Consulate.

**DEATH OF PROFESSOR JOHNSTON.**—We have inadvertently omitted to notice in a previous No., the death of Prof. Jas. F. W. Johnston, which took place at Durham, England, during the past fall. In Prof. J., agricultural science has lost one of its brightest lights. With very high attainments as a chemist, he combined the happy talent of making a practical application of his knowledge. His "Lectures on agricultural chemistry" have done more perhaps, to popularize the application of chemistry to agriculture, than all other works on the subject together.

### MOWING AND REAPING MACHINES.

Among the numerous articles introduced to the public through the pages of our journal this month, will be found several Reapers and Mowers, to which we would call attention, as the season is near at hand when those intending to purchase these machines should be looking about them.

Messrs. Ray & Co. of this city, it will be seen, offer a newly invented machine, for which they claim great simplicity and efficiency, and will no doubt have it in full practical operation the coming harvest.

Messrs. J. S. Wright & Co. of Chicago, also offer their Atkins' Reaper to our Farmers. This machine has obtained considerable celebrity in various quarters of the country, and enjoys much favor with many of the farmers of the West.

Mr. R. L. Allen, of New York city, offers his Mower and Reaper, as warranted to give entire satisfaction, and gives in a pamphlet he has sent us, a large number of testimonials from New York farmers in its favor.

Mr. Hussey, of this city, has shown us a working model of his Reaper with his newly invented Self-Raker, which will be put in practical use this harvest, and which he thinks will be found less exceptionable in some material points, than other inventions of the same character. Mr. Hussey is busily engaged at his extensive establishment in this city, preparing for the rush that is expected upon him the approaching season.

Other inventors and manufacturers should lose no time in making known, through our pages, their pretensions to public favor.

### DRILLING CORN.

The importance of adopting the drill system of planting and covering corn, is so evident that no planter or farmer should fail to adopt the practice. In the eastern counties of Virginia and N. Carolina, the corn drill is probably more used and more highly appreciated, than it is in any other section of this country; with a horse, man and drill, about fifteen acres are planted, covered, and rolled (in those counties) per day; thus performing the work rapidly, and saving an immense amount of labor and time. No extraordinary preparation of the land is necessary, previous to using the simple and strong machines that are now constructed. The usual mode of preparing the land, manuring, &c. as practiced for the "check" system, is all that is necessary to be done; when the corn is fairly up, it is harrowed, top dressed, thinned out, cultivated, &c. in a manner better understood than practiced. One of the best drills for plantation use, is one manufactured in this city by Messrs. R. Sinclair & Co., the cost of which is \$21, which is as simple as an ordinary plough, and is equally strong and durable.

**McCORMICK vs. MANNY.**—The U. S. Supreme Court, in the case of McCormick against Manny, for infringement of his patent, decided all the points in favor of the defendant, and dismissed the bill at Mr. McCormick's cost.

The court held:—First, that Manny's reaping machine does not infringe any of Mr. McCormick's patents. Second, that the *divider and reel-post* used in Manny's machines are not the same in form or principle as the improvements patented by Mr. McCormick in 1845, and are no infringements. Third, that the forker's stand or position on Manny's machine is a new and useful improvement, invented and patented by John H. Manny, not covered by Mr. McCormick's patent, but it is different in form and principle, and is, therefore, no infringement. The injunction is accordingly refused, and the bill dismissed at the complainant's costs.

**FRUIT NURSERIES.**—Among the numerous advertisements in this No. of the Farmer, from the proprietors of old established nurseries, in various sections of the U. States, we are glad to be able to number a new one established near our city, by Mr. W. D. Brackenridge, of whose skill and qualifications for the business we have good reason to be satisfied.

**GREAT YIELD OF CORN.**—In the Baltimore American of 19th November, is the following paragraph: "*Immense Yield.*—Mr. Corbin Cooley has raised the present season, 1624 bushels Corn, on 14 acres—or 116 bushels to the acre." A respected correspondent whom we would be glad to oblige, asks for information as to the residence of Mr. Cooley. If any one can furnish it, they would much oblige us.

We would call the attention of our readers to the advertisement of Messrs. Robbins & Bibb; in which it will be seen, that they have very materially reduced the prices of the celebrated *Little Giant Mill*, which now brings it within the reach of almost every body. The *Little Giant*, we know from the personal experience which we have had with it, is a capital thing, and we can most cheerfully recommend it to the farming community, as one of the most valuable additions to modern Agricultural machinery.

**MURDOCH'S METEOROLOGICAL CLOCKS.**—We refer the reader to Mr. Murdoch's advertisement on another page, offering his weather Clocks to the public. The testimonials he presents of the value of these Clocks, are of such a character as to give assurance of there being no imposition upon purchasers. We have examined them at Mr. Murdoch's rooms, and were we not already sufficiently supplied with time-keepers, would be glad to secure one of these.

**THE PATRIOT.**—This old and reliable paper, will hereafter be conducted by J. F. McJilton, William H. Carpenter and John Wills. These gentlemen are all well known as good writers, and doubtless will make the Patriot compare favorably with any paper in the country.

## WORK FOR THE MONTH.



The season may yet be unpropitious for field labor—if so, and you have not already attended to the duty, lose no time in securing a good supply of wood for next season—during the warm months of summer, it will become dry, and ready for use the next cold winter.

Have your ploughs, harness and implements all in good order, and ready for a vigorous effort, to make up for lost time occasioned by the severity of the past winter.

### MARCH.

Although the severe winter through which we have just passed, may have operated to delay field operations for some weeks, in those parts of our wide-spread country where its intensity may have been most severely felt; yet there are portions where, to delay active field work, would be disastrous in the extreme to the future hopes of the agriculturist; and, as the time has come, when all should have completed their arrangements and matured their plans of culture—when all should have secured their supplies of manure, seeds, and whatever else that may be calculated to promote their success the present season, it becomes us to point out, in a deferential way, some of the most important things that should claim attention, and that promptly. But before we commence naming such matters, we would, in the most friendly spirit, admonish our readers, that system, order, regularity and perseverance, are among the best means of success that a cultivator of the soil can call to his aid, in the prosecution of his labors. Every particular piece of work that may be begun, should be done, before another is taken in hand. To secure this result, the master should give his personal presence while the work is in progress, see that nothing be done slightly, that it be done in the right time, and in the right way; half

done work, in farming, should never be tolerated, as it can only end in disappointed hopes and diminished products. Every cultivator should studiously avoid cultivating more land than he can properly attend to, and nourish the crops that may grow thereon. All lands that require it, should be supplied with manure, as every exhausted, or partially exhausted acre of land, that may be cultivated without this attention being paid to it, will undoubtedly act as a drawback upon profits.—And here let us remark that nothing but the most imperious necessity should induce any one to put in a crop of corn, unless the land be very fertile, very rich, in all the elements which enter into the food of plants, without thoroughly manuring it. Corn, as every practical corn-planter knows, is a crop that requires the most bounteous feeding; such is its voracious appetite that you cannot well feed it to satiety. Hence then, none should attempt to put in a crop of corn upon any but rich land, without giving it a liberal, a generous dose of manure; for if he do, and he indulge in the hope of remunerating profits, he will

assuredly reap a harvest of disappointment.

Nor should the corn-planter be less careful in the preparation of the soil—its ploughing, harrowing, and rolling, should be thorough and complete. Half executed preparation of corn land, is mockery; the culture of the crop after it is up should be judicious and cleanly, as the plant has an utter aversion to the companionship of weeds or a baked surface.

With these preliminary observations we shall proceed to call attention to such matters as, in our opinion, require immediate and particular attention on the farm.

#### SOWING OF CLOVER SEED.

As the inclemency of last month prevented most farmers from sowing clover seed, we advise all who may not have done so, to sow as soon as the frost is out of the ground, and a horse can be safely trusted on it without danger from poaching the soil. On each acre in wheat, 12 lbs. of clover seed should be sown. When sown, a roller should be pressed over the field for the double purpose of covering the seed, and forcing the wheat plants into the soil, thereby encouraging tillering. Indeed, if the wheat crop should appear to have suffered from winter-killing—as the term is—we would precede the roller with a light one-horse harrow.

We will here improve the occasion to say, that we hold it to be an agricultural truth, that no soil can be preserved in a state of fertility, unless clover or grass, forms a portion of the system of rotation of crops, with the view of returning to the land the materials for forming mould, to replace that which is taken off by the crops.

In connection with the subject of sowing clover seed, we will remark, that our opinion is, that both the hay and pasture would be improved, if besides the quantity of clover seed per acre which we have named, a bushel of orchard grass seed per acre were also sown. Clover and orchard grass, blossom about the same time, which render them proper seeds to be sown together.

If the field on which clover may be sown is supposed to want liming, a dressing of ten bushels of slaked lime,—and the longer it may have been slaked the better,—five bushels of slaked ashes, and one bushel of plaster, per acre, may be very advantageously applied as soon after harvest as possible. Stock of all kinds should be kept off the field the first year it may be set in clover, and every spring thereafter, it should receive a dressing of one bushel of plaster per acre.

#### MEADOWS.

If your meadows be tight-bound, and yielded indifferently last year, harrow such as soon this spring as the frost is out of the ground, spread thereon five or ten bushels of ashes, and one bushel of plaster or lime, per acre, and finish by rolling. Five bushels of ashes, two bushels of bone-dust, one bushel of plaster, and one bushel of salt, would still be a better dressing. If the latter mixture be used, it should be harrowed in and rolled.

If the grass stands thin on the ground, the meadow would be greatly improved by sowing a gallon of timothy seed per acre, and harrowing them in with the top-dressing.

#### OLD FIELDS.

Old fields, being thoroughly harrowed and cross-harrowed, if top-dressed with five bushels of lime, five bushels of ashes, one bushel of plaster, two bushels of bone-dust, and one bushel of salt per acre, and shut up for a year, and protected from stock, may be converted into fair pastures. The top-dressing should be harrowed in, and the ground then rolled.

#### PREPARATION OF CORN GROUND.

The time for preparing corn ground, must depend upon its locality; therefore, it would be futile to attempt to name any day for the commencement of such work. The proper time every where may be said to be, when the frost is out of the ground, and when the soil is sufficiently warm to encourage the germination of the seed. But though it may be, and doubtless is, too early over a great part of the corn growing region to commence ploughing, still it is time to begin to prepare for the crop. As soon as from the nature of the ground the teams can be advantageously put to work, they ought to be engaged in hauling out the manure. The manure, as being removed from the cattle and other manure yards, prior to being put in the carts or wagons, should be shoveled over and mixed with plaster in the proportion of one bushel to every 20 two-horse cart loads. When hauled out and placed in position, the piles should be covered over with earth and patted down so as to prevent injury from the weather. If, when the manure be hauled out it be time to plough, the manure should be evenly spread, (at the rate of

twenty two-horse loads per acre,) as evenly as possible, and ploughed in as soon after being spread as practicable, in order that as few of the volatile gasses be lost as possible to prevent. We have named twenty two-horse loads of manure per acre; this we deem a moderate and safe quantity to ensure a good crop, the season being favorable; but if twice the quantity of farm-yard manure could be supplied, none need apprehend any danger from a surfeit, as the corn-plant has a stomach like an ostrich and the appetite of a London Alderman,—scarcely anything in the shape of manure comes amiss, while its powers of digestion derides the idea of repletion.

*As to depth of ploughing.* In all sound land where corn may be planted—that is, land not naturally wet, or with a wet subsoil—we go for deep ploughing, say eight inches in depth—thorough pulverization by means of the harrow and roller. If the field be a clover-lay, or grass sward, after manuring, it should be ploughed carefully and truthfully without balks, to the depth indicated above, the furrows should be laid flat; then the roller should be passed over the field to close up the seams, the harrow should then be used in the direction of the furrows, until a fine tilth be obtained. Too much pains in this respect cannot well be taken, as thorough preparation before planting cannot be too highly valued it ensures; a congenial bed for the plants to extend their roots through, and saves much labor and time in after culture. Before laying off the ground for planting, the soil should be rolled.

*For distance of rows.* This is a matter which we will not pretend to settle, as it is one of those questions which will ever be considered a debatable one. It has often been mooted and discussed, but never settled; and, as we believe, never will be. The proper distance is to be regulated by the circumstances of each case—location, climate, soil, kind of corn, are all considerations to be looked to in determining distance of the rows. So far as our own experience goes, we have found four by three feet an eligible distance, leaving, at the time of thinning out, three of the best stalks in each hill; but to support that number of stalks and ensure their bearing fine, well filled ears, generous manuring and cleanly culture are indispensable.

*As to the application of lime to the corn crop.* With regard to the application of lime to the corn crop, we do not know that we can perform a more acceptable service to our patrons than by transcribing the views of Dr. William Darlington, of West Chester, Pa., upon the subject. Dr. D., besides being a practical farmer, and a good one, possesses as much scientific knowledge as any other gentleman in our country, and is withal, passionately devoted to the cause of agriculture. Hence, the experience of such a gentleman, is invaluable, because it comes commended to us by one eminently qualified to advise, and whose identity with the farming interests, and whose predilections, afford us the strongest guarantee that could be asked for, that his opinions are founded in honesty. He says:—

“The quantity of lime per acre which can be used advantageously varies with the condition and original character of the soil. Highly improved land will bear a heavier dressing than poor land. On a soil of medium condition, the usual dressing is forty or fifty bushels per acre. A deep rich soil or limestone land in the great valley, will receive

seventy to eighty (and I am told even one hundred) bushels to the acre, with advantage. On very poor land, twenty to thirty bushels per acre is deemed most advantageous to commence with. It is usually repeated every five or six years, i. e., every time the field comes in turn to be broken up with the plow; and as the land improves, the quantity of lime is increased. The prevailing practice here is to plough down the sod or lay in the fall or early in the spring; harrow it once, and then spread the lime (previously slaked to a powder) preparatory to ploughing the field in corn. Every field in rotation, receives this kind of dressing; and as our farms are mostly divided into about half a dozen fields, the dressing, of course, comes once in six years, more or less, according to the number of the fields. Some enterprising farmers, however, give their fields an intermediate dressing on the sod, after they come into grass; which I consider an excellent practice, tending rapidly to improve the condition of the land."

In speaking of the state in which the lime is applied, Dr. Darlington states:

"It is usually obtained in a caustic state from the kilns, deposited in heaps in the fields where it is to be spread, and water sufficient to slake it to a powder is then thrown upon it. As soon as slaked it is loaded into carts, and men with shovels distribute it as equally as possible over the ground. It is generally considered best to put it on the ground whilst it is fresh or warm, as the phrase is, and it is certainly easier to spread it equally while in a light pulverized state than after it gets much wet with rains. I am inclined to think, too, it is better for the land applied fresh from the kiln."

In answer to a question put to him, as "to what crop lime is most advantageously applied," and "at what seasons," Dr. Darlington remarks:

"It is usually applied, as already intimated, to the crop of Indian corn, in the spring of the year. \* \* Occasionally it is applied preparatory to sowing wheat in autumn. When used as a top-dressing, on the sod, it is generally applied in the fall—say November. The prevailing impression is, that it is most advantageously applied to the Indian corn crop; and hence the general practice. But the truth is, it is highly advantageous at any and all seasons, and our shrewd old farmers have a saying:—*Get your lime on for your corn crop if you can—but be sure that you get it on the land some time in the year.*"

The mode of spreading and incorporating the lime, he describes as follows:

"The lime is spread as equally as possible over the field, and the ground is well harrowed in different directions, in order to incorporate the lime with soil."

The views of Dr. Darlington in the preceding remarks are doubtless enlightened and correct—they detail his own practice and experience, and are in accordance with the experience and practice of the Pennsylvania farmers generally. And as lime has been longer and more generally used in Pennsylvania for agricultural purposes than it has in any other State, we think it safe to infer that the practice there so long and so successfully followed, may be very advantageously adopted anywhere and everywhere.

Monsieur Puvis, of France, who is at once a practical farmer—the cultivator of a large domain, a chemist of reputation, as well as an expert in the whole range of sciences, after making a series

of experiments in the use of lime for agricultural purposes through a long course of years of watching and noting effects, arrived at the conclusion that the safest, most economical, and most advantageous application of lime was to apply ten or twelve bushels per acre, at the commencement of every four years rotation, when the land came to be turned by the plough.

This practice in France is not materially different from that pointed out by Dr. Darlington.

With regard to our own views as to the application of lime, they are these:

Upon poor and exhausted lands, or light sandy ones, we would apply twenty bushels per acre, at the time of breaking them up, and repeat this application until we had given the land one hundred bushels per acre.

Upon medium quality of land, we would apply thirty bushels as the first dose, and repeat that quantity when the land came to be ploughed up again in the course of rotation, and continue applying the lime until we had given it one hundred bushels per acre.

To strong, fertile clays, well charged with organic remains, we would give them fifty bushels of lime at the commencement of a rotation, repeat the dose at the commencement of the next rotation, and then rest for 14 years.

Upon old grass swards, where the soil was of a stiff clayey nature, and fertile, we would not hesitate to apply one hundred bushels per acre, in a single dose: and we think the most advantageous plan of applying it to such fields would be to apply it to the sod, and harrow it in a year or so before ploughing up the land. After all that may be said upon the subject, the great object is to get the lime on and well mixed with the soil, and the nearer we keep it to the surface so much the better, as in that case its action upon the soil will be the more general.

**Working Corn.** This question has often been asked of us.—How often should corn be worked. To this question our answer has uniformly been to the effect, that the number of times that a crop of corn should be worked depends on circumstances; that the object of the culturist must be to keep the soil open to the action of the influences of the atmosphere, and the plants free from weeds, from the time they first come up, until laid by; that keeping these main objects in view, no corn planter could be at a loss to determine when and how many times his corn crop would require to be worked; that the weeds as they presented themselves should be eradicated, and that in times of drought it was always beneficial to work the crop, in order that the soil might be opened and placed in a condition to absorb and condense the dews with increased activity.

#### OATS.

As we were full in our remarks upon this crop last month, we have but to briefly allude to the suggestions we then made. The oat crop though neglected in this country, and, as a consequence, slovenly cultivated, it should not be. By only tolerably liberal manuring—thorough preparation of the soil, and early seeding, it may be made a very lucrative crop. We therefore, recommend our friends to get their oats in early—as early as the ground can be properly worked, is the time to seed oats in every locality. Even in our own state there is a difference of from four to six weeks as to the time of getting in this crop. When the frost is

out of the ground, and the soil sufficiently warm to cause the germination of the seed, then is the time for putting in the seed. Those who expect large remunerating crops, must put the soil in good condition to justify such expectation. There must be food in the ground for the plants to feed upon, and the ground itself must be put in first rate order. In this country, from sixty to one hundred bushels have been grown upon a single acre, but such crops are not to be expected upon fields of large dimensions; however, with proper care the ordinary yields may be very materially increased. Where such large crops as we have named have been raised, every possible care was observed in the preparation of the land, both as regards manure and pulverization, as well as in heavy seeding; from four to six bushels of oats being sown to the acre.

Ordinarily, with us, less than two bushels per acre, say one and a half bushels; but we hold it unsafe to sow less than two bushels, and believe that three bushels per acre would be the most eligible quantity.

Upon the culture of oats we extract the following remarks from a very able work published in London, in 1854:

"There are three varieties of the oat cultivated in Great Britain, the *white*, the *black* and the *dun*. The first named are separated into two principal divisions, the early and the late, and those again into many others, each having slight peculiar characteristics.

The *Potato Oat* is one of the finest of the early kind, yielding well and of fine quality. \* It is white, plump, and short; a superior sample weighs 48 lbs. to the bushel, and it will yield more meal than the same weight of any other kind.

It should be cut before it is quite ripe, as the seed will shake out with the least motion when it is perfectly ripe.

The *Sandy Oat*. This is not quite as good as the last mentioned, being smaller and lighter; it is nevertheless valued by millers. The straw of this oat is perfectly strong, and consequently well adapted for sowing on soils where crop is likely to be laid.

The *Sheriff Oat* is light grained, with moderate length of straw, and is much earlier than those before mentioned, but not so heavy per bushel.

*Hopetown Oats* were formerly in much request, but the seed is supposed to have degenerated, the qualities formerly attributed to it not now appearing. It is generally sown with other kinds, as the potato and sandy oats, the straw of this variety being so weak as to require the assistance of the other kind to support it. Crops of this mixed kind are said to produce a larger amount of grain than when either of the sorts are sown singly.

The *Hopetown Oat* has a large grain, thick husk, and is of a brownish color; it does not meal as well as those before mentioned.

*Late Angus* are well adapted for clay soils.

*Siberian Early White* is a prolific variety, with a thick husk, but such inferior straw that it is unfit for fodder.

Late or common oats, grow freely on poor and light soils; the grain is large, and the straw particularly good for feeding cattle. They grind well, and are much preferred by the millers on account of their stinty character.

The *Black Tartarian Oat* is particularly well

suited to peaty and marshy soils. The straw is tall and thick, but too reedy for fodder; it succeeds best in moist situations. It is an excellent kind for feeding horses, for which purpose it is largely grown in England.

In Scotland it is occasionally made into meal; but the millers do not like dark skinned oats, as the meal is discolored if any portions of the husk remain.

The *Dun Oat*, and the *Winter Dun Oat*, are both much grown in Scotland, and are considered as good varieties.

There are a great number of other differently named oats in common use, but they are chiefly varieties of those before mentioned.

The soils best suited for the growth of oats, are wherever they have been formed by the alluvium strata not characterized by the presence of too great an amount of aluminous or clayey matter. Such soils if drained and in proper condition, will produce the best crops of the finest varieties."

#### BARLEY.

As soon as the frost is out of the ground prepare your ground for this crop. Any good wheat land, or a deep sandy loam is adapted to its growth. The ground should be thoroughly and deeply ploughed, and as thoroughly pulverized by harrowing and rolling. The land must be either naturally fertile or made so by manuring.

*Quantity of seed per acre.* From two to two and a half bushels of seed per acre should be sown the same as wheat.

*The time of cutting* is before the berry is quite ripe, as if left till perfectly ripe the seed will shatter.

#### HAULING OUT MANURE.

We have before spoken of this branch of the subject, under the head of preparation of corn grounds, but as it is a very heavy job, refer to it here under a distinct head to attract attention to it at an early period.

#### LIME.

We repeat here what we have often written before, that no land that may have been exhausted by improvident culture, can be permanently improved without being limed. No one should despair of accomplishing such object because of the heaviness of the outlay to enable him to put on one hundred bushels to the acre, the maximum quantity applied in this country, as for all *present purposes* twenty bushels of lime per acre will answer just as well as will one hundred bushels per acre, so that the man with a *short purse* may lime five acres, for the same sum as his long pursed neighbor had paid for liming one acre. The application of this twenty bushels should be repeated at the beginning of every rotation. By such applications of lime one field may be made to lime another by its increased products, and thus render what in the abstract is viewed as an onerous business, an easy one. But let no one suppose that in liming his land he has applied all that is necessary in the way of liming; for such is not the case; he must also apply organic or animal manures, and put one or more of his fields in grass or clover at each succeeding rotation.

#### MILCH COWS—IN-CALF COWS AND HEIFERS.

This is a trying month with milch cows, therefore let them receive increased attention, as we have before pointed out.

## WORKING ANIMALS.

Let these be attended to, as we pointed out last month.

## SHEEP.

Let these be particularly attended to during this month.

## EARLY POTATOES.

As soon as the frost is out of the ground, and it can be ploughed and put in first rate order, is the time to put in early potatoes. The land must be ploughed, harrowed and rolled until a fine tilth be obtained. Cut the sets a week before planting them, dry the sets with plaster and place them in a cool place.

Run furrows six inches deep, put in four inches of long manure, place your potato sets therein, ten inches apart, previously have prepared a mixture comprised of four parts slaked ashes, one part plaster, one part slaked lime, and one part salt—give the sets a dusting with this mixture, and cover them over two inches deep. When the potato plants come up, dust them with this mixture. When big enough to work, dust them again with the mixture, and repeat the dusting at every working, and at intervals of a week until the vines are out of bloom. This dusting must be done early in the morning when the vines are wet.

## ROOT CULTURE.

It is too early to put in field crops of roots for cattle food, and we only remind you now that you may be preparing to put in an acre or two of the following roots, viz : Sugar Beet, Mangel Wurzel, Parsnip, Carrots and Ruta-baga, to feed your stock next winter.

## FENCES.

Carefully examine these, and have every defective panel restored.

## ORCHARD.

All the trees in your orchard should be carefully examined, and each dead-limb, carefully sawed off into the sound wood; the wound left should be smoothed down with a drawing-knife; dress the wounded part with a mixture comprised of equal parts of fresh cow-dung and lime, or with a mixture made of two parts clay, one part lime, and one part tar, or you may paint the face of the wound with varnish, manure around the trees and otherwise treat them as we advised last month.

## PLANTING ORCHARDS, ORNAMENTAL TREES AND SHRUBBERY.

This work should be done as soon as the frost is out of the ground.

In purchasing avoid tree pedlars, and be sure to have your trees properly planted.

## FLORICULTURE—FOR MARCH.

Prepared for the American Farmer, by Jno. Feast, Florist.

As the Spring advances much preparation will be necessary to push forward plants as rapidly as possible, owing to the severe winter, which will keep vegetation back longer than usual; and, from present appearances, will prove fatal to a great many plants growing out of doors. Many fine specimens, if not entirely killed, will be cut down to the ground, and require years to attain the same size; and it will also prove those which are quite hardy.

*Camellias* and *Azaleas* will be in fine bloom at this time; and as they begin to grow, give them a

watering of liquid manure or guano at times. Also grafting or in-arching may be done, and cuttings put in a convenient place for a young stock. Fertilize the different flowers for seed; for new varieties to be obtained, keep a little higher degree of heat, in order to forward the growth.

*Cinerarias* and *Calceolarias* re-pot in larger pots. As they advance in growth be careful in tying the plants up, and spread out the shoots, in order to give them room to form fine specimens. Fumigate to keep down the green fly, which soon disfigures the plants if allowed to remain. Put the plants as near the glass as possible, in order to make bushy dwarf specimens.

*Dahlias*.—It will be necessary to examine the roots, and if some are wanted for an early bloom, start them into growth by re-potting the whole or part of the root selected. By this method plants will be nearly in flower before the dry roots are put in the ground for a late bloom. Seed may be sown in some warm place, and when grown sufficient put in small pots to turn in the open ground at a proper season for transplanting.

*Achemenes*, *Gloxinias*, and all bulbous roots of like character, re-pot in suitable soil and pots of proper size. They require to be kept warmer than green-house plants generally, and in a moist atmosphere, a little shaded from the mid-day sun. Under such treatment the foliage will be fine, and mostly succeeds with a good bloom.

*Hot Beds*, for the sowing of seeds, may be got ready; and the protection of young plants for heading out, as *Verbenas*, *Petunias*, and others; also such plants as have done flowering in the house, put aside, and arrange in order those that are yet to flower to give the best effect.

*Geraniums* will be making rapid growth. Keep them clean and free from insects, and near the glass, with plenty of air on fine days. By the end of the month pruning out of doors can be done, and such other work as getting the borders cleaned, walks made, and edgings planted of dwarf, box, or other material.

**TENNESSEE.**—M. D. L. Stewart, Esq., Secretary of the Agricultural Society of Shelby Co., Tenn., writes us, under the direction of the Society, to subscribe to the *American Farmer*. He says:—"The spirit of Agriculture with renewed force has seized upon the minds of our people, and a mighty effort is now being made, to make Tennessee stand second to no State in the Agricultural and Mechanical Arts." We heartily wish our Tennessee friends good speed. They will find generous rivalry in the good work of improvement among their brother farmers of Maryland, Virginia, North Carolina, and indeed nearly all our Southern States.

**THE JAPAN PEA.**—The editors of the Philadelphia Ledger have recently seen a plant from one of these peas, raised by W. L. Shaffer, Esq., the Cashier of the Girard Bank, which had upon its branches about four hundred and fifty pods, the largest portion of which contained from two to three peas each, or yielding about one thousand per cent. This from a single pea, in a single year's growth, is something worthy of notice. If each pea possessed the qualities of reproduction in the same degree, we should have in the second year's growth nearly a half a million of pods and a million of peas.

## OFFICE OF STATE CHEMIST.

To the Editors of the American Farmer:

Feeling some interest in this subject which has recently claimed considerable public attention, and believing as I do that it is a matter on which every tax paying citizen has a right to express an opinion, I venture to give mine.

No one can doubt that the Legislature in framing the law, intended it for the benefit of the Agricultural interest of the State; and incidentally, at least, to benefit other interests—the consumers, as well as the producers. What benefits this, the greatest interest, is in some degree shared in by all classes. On the other hand, if this interest is depressed from untoward seasons and short crops, it is felt by all other classes in the State.

Hence the question, after some seven years of trial, has the law, as carried out, answered the public expectation? Have the crops paid well, as we farmers say?

After carefully reading all the reports of the incumbent made to the Legislature, I have strong doubts whether this crop pays the cost of cultivation, much less the cost of seed, and a fair margin of profit. I understand the experiment has cost the State some twenty thousand dollars; and if one could form a correct opinion, by the very generally expressed views of farmers, we have paid, and are continuing to pay "pretty dear for the whistle."

I am willing to admit for argument's sake, that the Law was very inefficient and defective, as the State Chemist has often asserted in Reports, that it was; and possibly also, that the present incumbent has in all cases carried out its provisions in the best practicable manner, and was as competent as any other person in the State.

Now admitting all this, and even more, I do not believe it begins to pay; and I think the sooner the office is abolished, and the fund appropriated to a well organized Agricultural College, the better will it be for all concerned—better for the State, better for the farmer, and better, by his own showing, for the State Chemist.

After saying that I have seen little in the preceding reports of a practical useful character, not familiar to the well read and well informed farmer, and which was not accessible to all, from other source, I pass them by, in the hope that others have been more benefitted by them than I could, and come to the last report,—and which we might reasonably conclude would be the best, after seven years experience to guide and direct. It is public property, paid for out of the public money, and the public certainly has a right to express an opinion of its value, before paying for more of the "same sort."

From page 1 to 14 inclusive, is mainly taken up, either directly or indirectly, in argument and reasons for a continuance of the office of State Chemist; and as appears to my—and perhaps limited comprehension—is not in accordance with either the letter or spirit of the law creating the office. But we will pass this by also, under the supposition that the Legislature had not, or could not frame an efficient law, and were not advised of the great necessity that existed for its continuance, imperfect as it was.

On page 14 we find this assertion without reservation or qualification:—"At the time of my first going into office, no manures, save a little marl, or lime or stable manure, badly taken care of, or a

[\*It has cost nearly, if not quite \$30,000.—Ed.]

few thousand pounds of bone dust, were used in Maryland!" Now gentlemen, I would ask you, and for my own information, if this is really true, or merely a figure of speech? Can it be possible that in the State of Maryland, prior to May, 1848, when the State Chemist first "went into office," that our farmers were so poor as to be able to buy "little" of these things, so benighted as not to know of their value; and worst of all, so reckless of their own interest, as to cast them aside as utterly worthless? If this is not a wholesale slander on the whole body of farmers in the State, then I blush for our character abroad.

Again, in page 19,—after omitting four pages of admitted "errors," [see erratum on last page,] we quote as follows, also in substance repeated on page 11. "Since the creation of the office, the use of all the permanent manures, such as lime, phosphatic guanos, and bone dust, has increased a hundred fold, and in a great degree by reason of, and by the immediate and direct influence of its teachings." Now if this is correct, the "office" has exerted a vastly greater beneficial effect than I had supposed; and why? In many sections of the State, and long previous to this advent, lime was extensively used; and all the bone dust that could be procured "for love or money" found prompt and ready sales. Nay more, it is within my personal knowledge, that for years previous to 1848, orders went from this, and were filled in a neighboring State, for many thousands of bushels of ground bones.

So far from the use of these articles being increased one hundred fold by the "teachings" of the office of State Chemist, or any other teachings, since 1848, I believe they have materially decreased, in many and large sections, by the introduction and general use of Peruvian Guano. More lime, if not more bone dust, was used in the upper and middle counties of the Western Shore, if not also in some of the Eastern Shore, prior to 1848 and '49, than is at this time. For I think my data is quite reliable.

There is however a paragraph on page 19, taken in connection with the arguments and reasonings of the preceding pages, in favour of continuing the office, its salaries, &c, that is very difficult for a plain unlettered farmer to understand and reconcile. If you can throw any Editorial light on the subject I hope you will do so; for I perceive you frequently respond to the queries of your subscribers about manures, grass seed, &c. &c. and this may perhaps be also in your line. The report reads, "From the above it will be seen that this office has not and could not be of any pecuniary profit to me, and that I have used it with no such end in view, therefore I can speak of its utility to all, and of its necessity indeed to a large portion of our fellow citizens. Let it be judged by its fruits, and even if these have not been abundant, they greatly exceed the cost."

Now my difficulty is just this, and I expect it will puzzle wiser heads than mine. If the office is not, and cannot be of any pecuniary profit to the incumbent, why so much anxiety for its continuance, in opposition as I verily believe to the wishes of nineteen-twentieths of our citizens; for they consider it "a tree that beareth not good fruit."

I cannot attribute to any one an unworthy motive, and until better informed, must suppose the object to be a pure love for scientific research, and the pleasure of imparting instruction to others. This,

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if it did not cost quite so much, I should commend in the highest degree: as few persons are found, who like the State Chemist, are willing to devote their time in the labyrinthian researches of Chemical science, without "pecuniary profit," liberally disseminating their knowledge without reward.

I had marked some other portions of the report, intending to refer to them and ask further questions; but my paper is out, and doubtless you will conclude this is enough for one letter.

In conclusion at this time, I would remark, that I do not desire to take anything from, that can be justly claimed for, the office of State Chemist; but judging by its "fruits" I do believe a vast deal more is claimed for it by the incumbent, that there is a shadow of title for it; and if the State would expend the same amount of money in purchasing and distributing gratuitously over the State, 3 or 4,000 copies of the American Farmer, it would benefit the Agricultural interest "one hundred fold" more than this office ever has, or is ever likely to do.—In its valuable and ample pages may be found both theory and practice, united with the experience of the best farmers in this and other States. Its "teachings" are valuable on many subjects connected with Agricultural pursuits, and have done infinitely more to increase our products and enlighten our farmers, than has the office of State Chemist. Of its voluminous reports—sixteen thousand copies in this one edition, very few will probably take the pains to "winnow the wheat from the chaff," and still fewer know how properly to prepare the soil for its cultivation, when the grains are separated from the surrounding mass of extraneous matters.

Respectfully, yours,

A PLAIN FARMER.

[The above is from one of the most intelligent and respected farmers of our State.—Ed.]

#### ABOLISHMENT OF THE OFFICE OF STATE CHEMIST.

After the most mature deliberation, the Committee on Agriculture have reported to the House of Delegates, through their chairman, Mr. Davis, a bill to abolish the office of State Chemist. For reasons heretofore given, we are satisfied that, under existing circumstances, it is a proper step, and will be approved by the great mass of the farmers of the State. We learn from Annapolis, that there is a very general feeling in the Legislature against the continuance of the office, and we hope that the lobbying employed to defeat the bill now introduced, and the petitions that are being presented, for its continuance, (of which we have heard some queer stories) will not be permitted to stave off the action of the House to too late a day for a final decision.

To the Editors of the American Farmer.

DEAR SIR:—Will you be kind enough to give me some information respecting the treatment of milch Cows, to prevent their dying with the ailment, as is the case with most of them we buy in the valley of Virginia, and bring down in this part of the State, July, August, and September, are the Fatal months with them.

A FARMER.

Chesterfield Co., Va., February 4th, 1856.

Will some of our subscribers favour us an answer to the above.—Eds. AM. FARMER.

**CHAFFING HAY, &c.**—Long feed should never be fed to domestic animals. By chaffing, a very considerable saving may be effected, even of the best and most sapid materials. By using an improved chaffer in the preparation of long fodder, and a rasping machine in preparing roots, from one-fourth to one-third of the food ordinarily required to winter a stock of animals, may be easily economised. With the first of these implements, much refuse matter may be advantageously worked up, and by means of the latter, provided you have a supply of beets, turnips, carrots, or other roots, it may be rendered highly palatable to almost all animals. These machines cannot be too highly recommended, and will be found to supply a desideratum on every farm.—*Germantown Telegraph.*

We see it commonly said in agricultural papers that it is economical and otherwise desirable to chaff or cut up all long feed intended for stock.—We are not sure of any very decided advantage which the practice has, except for giving bulk to chopped Rye and other ground food. An animal which has his hay furnished him in due quantity will consume all that he ought to consume, that is all that is sound and fit for food. To cut up *Refuse* matter and mix with other material to induce an animal to eat it, is decidedly a practice to be condemned. It is *Refuse* only because it is unfit for use, and the instinct of the beast who *refuses* it, is the best test of its unfitness.

**GRAIN IN THE WEST.**—A correspondent in Lincoln Co. Mo., in remitting his subscription, remarks:

"Your Eastern merchants are holding back to get our produce, at reduced rates in the spring, but I guess they will miss the figure, as our wheat is nearly all sold, and our corn does not husk out as well as was expected before gathering."

We have seen statements of similar import, from other sections of the West. Agents for foreign governments were through the West, during the past Fall, buying up grain and provisions, and the great demand and high price, induced great efforts to get the surplus in the West, to market before the navigation of the rivers and canals were frozen up, and it may be found that the stock on hand is not as large as has been represented.

**HOYT'S SUPER-PHOSPHATE OF LIME.**—A very material error having occurred in Mr. Lockwood's advertisement on our supplemental sheet, in the figures of the following extract, we re-publish it here in a corrected form:

Professor Hildreth, of New York, says: "After deducting 16 4.100 per cent. of water, and 4 1.100 per cent. of Silicate of Lime (Sand) or a total of 20 5.100 per cent.; we have 79 1.100 per cent. of valuable fertilizing salts in your preparation; 48 3.100 per cent. of which is Phosphate of Lime. There is evidently more of this Salt and of Ammonia, than is found in the average of Peruvian Guano, with the additional advantage, which is indeed very great, of having the Phosphate of Lime in the form of a *soluble Bi or Super-Phosphate of Lime*; besides the equally great advantage of having the Ammonia in the form of a *fixed salt* that will not escape by evaporation.

I can safely say, that your Fertilizer, placed side by side with any other Fertilizer with which I am acquainted, and used to produce the ordinary crops cultivated in the United States, whether Wheat, Corn, Esculents, Cotton or Tobacco, will excel them all.



## ALBANY AGRICULTURAL WORKS,

ON HAMILTON, LIBERTY AND UNION STREETS.

Warehouse, Seed Store, and Sales Rooms, No 52 State street, Albany, N. Y.

### EMERY BROTHERS,

SOLE PROPRIETORS AND MANUFACTURERS OF

Emery's Patent Railroad Horse Powers and Overshot Threshing Machines and Separators.

ALSO MANUFACTURERS OF AND WHOLESALE DEALERS IN

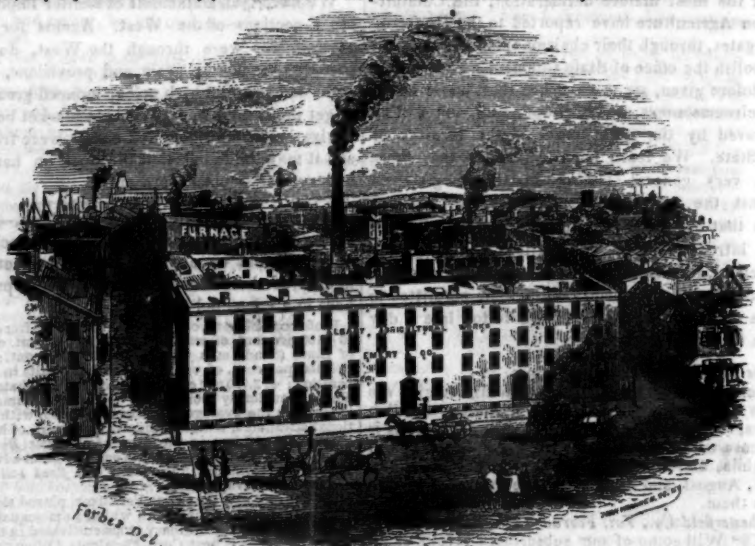
### AGRICULTURAL MACHINES AND IMPLEMENTS,

OF THE LATEST AND MOST IMPROVED KINDS EXTANT.

Dealers in Grain, Field, Grass, Garden and Flower Seeds, and Fertilizers.

**THE** Horse Powers, together with the great variety of Labor-Saving Machines, to be propelled thereby, being the leading articles manufactured by the proprietors, the attention of the public is especially called to them. Full DESCRIPTIVE ILLUSTRATED CATALOGUES containing directions, prices and terms of sale, warranty and payment, sent by mail, gratis, to all post paid applications.

Upwards of Twelve Hundred sets of the above celebrated machines, have been made and sold in this city alone during the last twelve months, and without supplying the demand. The public may rest assured the reputation heretofore earned in their manufactures, shall be fully sustained, by using none but the best material and workmanship, and by a strict attention to business, they hope to merit and enjoy a continuance of the patronage heretofore so liberally bestowed.



Forbes Del.

SEE NEXT PAGE.

As large numbers of Powers and other machines are being offered in various sections of the country, resembling those of the above manufacturers in almost every particular, it becomes necessary to caution the public against the deception, and to enable their own to be distinguished from all others, they would say, the words "Emery's Patent," are upon all the same wheels, "Emery" upon the links of the chain, and the name "Emery," in some manner, and all in raised letters, is cast upon some or all the iron parts of all their machines, beside the wood work being also stencilled, in a conspicuous manner, with the name of the proprietors and their place of business.

## WARRANTY, CAPACITY, ECONOMY, &c.

The Two Horse Power and Thresher, as represented by circulars, is capable, with three or four men, of threshing from 175 to 225 bushels of wheat or rye, and the One Horse Power from 75 to 125 bushels of wheat or rye; or both kinds of powers, &c. are capable of threshing double that amount of oats, barley or buckwheat per day, of ordinary fair yield.

These Power Threshers, &c., are warranted to be of the best materials and workmanship, and to operate as represented by this circular, to the satisfaction of the purchasers, together with a full right of using them in any territory of the United States, subject to be returned, within three months and home transportation and full purchase money refunded if not found acceptable to the purchasers.

## OFFICE OF INSPECTOR OF GUANO.

No. 11 EXCHANGE BUILDING.

THE following cargoes of Guano have arrived since last publication:

1855.	PERUVIAN.
Oct. 16th, Ship "S. Churchman" contained ammonia	15.75 per cent.
" 25th, Bark "Arethusa" contained ammonia	16.10 per cent.
Nov. 1st, Ship "Albers" contained ammonia	16.25 per cent.
" 17th, Ship "Avondale" contained ammonia	16.49 per cent.
Dec. 11th, Ship "Cairo" contained	16.50 per cent.
" 20th, Ship "Manlius" contained ammonia	15.65 per cent.

All of above cargoes contained from 5 to 30 tons damaged guano—marked D.

### WHITE MEXICAN.

December 23d, "Neptune" contained 33.93 per cent. phosphoric acid, equal to 73.51 per cent. bone phosphate lime, marked A. The standard for white Mexican guano A having been placed at from 75 to 85 per cent. of bone phosphate of lime, and no cargo having arrived since the first, which reached that mark, the undersigned has determined to reduce the standard, and to make all white Mexican guano containing from 70 to 82 per cent. A—and from 60 to 72 per cent. B. The present offers a favorable opportunity to make the change, as the above is the only cargo now in the market.

### MEXICAN GUANO.

Oct. 1st, "Howard" contained 22.68 per cent. phosphoric acid, equal to 49.14 per cent. bone phosphate lime marked A.
" 1st, "Peerless" contained 22.91 per cent. phosphoric acid, equal to 49.69 per cent. A.
" 1st, "Peerless" contained 30.54 per cent. phosphoric acid, equal to 66.77 per cent. A. A.
" 30th, "Echo" contained 19.10 per cent. phosphoric acid, equal to 41.38 per cent. B.
Nov. 9th, "Mary" contained 35.90 per cent. phosphoric acid, equal to 56.11 per cent. A. A.
" 26th, "Broosa" contained 14.25 per cent. phosphoric acid, equal to 30.88 per cent. C.
" 28th, "Gen. Scott" contained 26.57 per cent. phosphoric acid, equal to 57.57 per cent. A. A.
" 29th, "White Swan" contained 35.85 per cent. phosphoric acid, equal to 58.18 per cent. A. A.
" 28th, "Gen. Taylor" contained 39.10 per cent. phosphoric acid, equal to 63.05 per cent. A. A.
Dec. 2nd, "Louisa" contained 25.71 per cent. phosphoric acid, equal to 55.71 per cent. A. A.
Jan. 1st, "Mohawk & Peerless" contained 26.95 per cent. phosphoric acid, equal to 58.39 A. A.
" 1st, "Virginia Griffith" contained 27.53 per cent. phosphoric acid, equal to 59.75 per cent. A. A.
" 22d, "Echo" contained 28.10 per cent. phosphoric acid, equal to 61.88 per cent. A. A.
" 23d, "African" contained 27.41 per cent. phosphoric acid, equal to 59.39 per cent. A. A.

### COLOMBIAN GUANO.

Jan. 6th, "Pauline" contained phosphoric acid 40.19, equal to 87.67 bone phosphate of lime marked A.
Nov. 30th, "White Swan" contained phosphoric acid 40.95, equal to 88.73 bone phosphate of lime marked A.

WM. S. REESE,  
State Inspector.

MEXICAN GUANO.—The undersigned has now on hand, which he offers for sale at the lowest market price,

GROUND WHITE MEXICAN GUANO—A.  
Brown  
And will continue to receive supplies during the season.  
C. R. PEARCE,  
36 Buchanan's Wharf.

## SYRACUSE NURSERIES.

WE offer for the Spring demand the usual assortment of Nursery Stock, consisting in large proportion of FRUIT TREES OF ALL KINDS. Many of which are of such age and size as renders them so desirable objects of attainment to the impatient amateur, viz:

APPLE TREES.—Five and six years old, having already borne fruit,	price 50 cts. each.
PEAR TREES.—Three to six years old, Standard and Dwarf, bearing trees,	\$1.00 to \$3.00.
PLUM TREES.—In bearing for the last three years, \$1.	
CHERRY TREES.—Three to five years old, once or twice transplanted,	50 cts. to \$1.00.
CHERRY TREES.—Dwarf.—Fine lot of May Dukes, three years old,	\$1.00.

Among the Pears are many beautiful specimen trees, originally planted for our own fruiting. The varieties are mostly new, but of established reputation, varying from decidedly "good" to "first rate." Persons desiring younger trees, in order to train them according to their own preferences, can be supplied in large variety, with one year old Lwars or Standards that are truly magnificent. Selected trees, 30 cts. each, or \$25 per 100.

### EVERGREENS.

NORWAY FIRS, 1 to 2 feet, stocky & symmetrical,	\$12 per 100
BALSAM " 2 to 4 "	8.50 " doz.
BLACK SPRUCE, 1 to 3 "	2.50 " "
HENLOCKS " 2 to 4 "	very handsome, 16.00 " 100
ARBOR VITAE, Am., 1 to 7 feet,	8.00 " "

### MISCELLANEOUS ARTICLES.

Ornamental Trees and Shrubs, Roses, Dahlias, Philoxera, Green House and Bedding Plants in great variety—Osage Orange Plants, two years old, transplanted and cut back last spring, of extra fine size and growth. Single thousand \$5; 5,000 at \$4; 10,000 at \$3.50; larger quantity at \$3 per 1000.

OSTER WILLOWS, var. *vinifolia*.—Cuttings at \$2.50, whole shoots at \$5 per 1000.

ASPARAGUS ROOTS.—Two years old, at \$1.50 per 100; exceedingly fine.

RHUBARB.—Giant, Linneus, and Victoria, at \$10 per 100, large roots.

All the popular sorts of the smaller fruits, Currants, Berries, &c.

To wholesale dealers, whom we have been compelled to disappoint this Spring, and to others intending to buy largely in the fall, we can confidently hold out the promise of a supply at that time, unparalleled in extent, and unsurpassed in quality, by the products of any previous season within our experience.

Catalogues Nos. 1, 2, 3, 4, and 5, furnished for a stamp each to prepay postage. A letter stamp for No. 1, and for each of the others a one cent stamp.

THORP, SMITH, & HANCHETT,  
Syracuse, New York.

## AULT'S ENGLISH GARDEN SEEDS.

JUST received by steamers via New York, our supply of fresh and genuine Seeds, viz., Early Short Top, Scarlet and other early Radish, early and late Peas, large and premium Flat Dutch, Drumhead, and all other kinds of Cabbage, early late, and Welcheron Cauliflower, Early Purple Cape Brocoli, Early Blood Turnip, Long and half long Blood Beet, Long Horn, Long Orange and Belgian Carrot, White Solid Celery, Parsnip, Parsley, Spinnage, Turnip, Red, White and Yellow Onion, White Sugar and Mangel Wurtzel Beets, Tomato, Egg Plant, Cucumber, Flower Seeds, Ault's improved Swede or Ruta Baga, with all other Seeds and Beans in our line, all of which are of the same superior quality as those heretofore sold by us, which has given so much satisfaction. For Sale by

SAMUEL AULT & SON,  
Corner Calvert and Water Streets, Baltimore, Md.

## GREAT TRIAL OF CORN AND COB MILLS, AT CINCINNATI, FEBRUARY 22D, 1886. YOUNG AMERICA MILL AGAIN VICTORIOUS!!

The following telegraphic dispatch has just been received from Cincinnati:

The great trial of Corn and Cob Mills is over. The SILVER CUP PRIZE awarded to

### Leavitt's Young America Mill.

The Little Giant, after accepting the challenge, failed to appear in the contest, and Scott & Hedges' New Double Mill badly beaten.

E. WHITMAN & CO.,  
mh1 63 Exchange Place, Balt., Md.

### NOTICE!

#### THE TROY GRAIN MILL.

WE respectfully inform our agricultural friends that we are making arrangements to manufacture the TROY GRAIN MILL and CORN & COB CRUSHER COMBINED. A specimen can be seen in operation at our factory. In next No. of American Farmer we will give a full description, with figure of this truly unique Machine, and an article so valuable for plantation use.

mh1


R. SINCLAIR, Jr. &amp; CO.

### CHINESE, OR JAPAN POTATO.

DIOSCOREA BATATAS.

WM. R. PRINCE & CO.

Flushing, N. Y.

 CAN SUPPLY IMMEDIATELY, for cash remittances, genuine sound DIOSCOREAS in packages at \$5 and \$10 per package, in sealed tin cans, which go safely by Express; or they will retain them subject to order to be sent in March, either dry or growing in small pots. Descriptive pamphlets will be sent to applicants.

☞ Priced Catalogues of Trees and Plants will be sent to applicants.

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### "FINANCIER."



THIS distinguished racer and highly bred stallion, who is also one of the handsomest Horses in the U. States, (the property of Hon. John M. Batts, of Virginia) will stand for Mares at the Training Stable of Oden Bowie, Fell Hall, Prince George's County, Md., the next season, commencing 1st of April, and ending 1st of July. "Financier" is a dark chestnut, 15 hands and 3 inches high, by Boston, out of Rosalie Somers, by Sir Charles, g d. by Virginian, g g d by Bedford, (the g d of Tribe) g g g d by Bellair, Shark, Wildair, Lexington, Spanking Roger, Jolly Roger, imported Mare Miss Bell, brought to this country in 1753. Terms \$30, positively to be paid within the season. Mares from a distance well kept on grass or grain, as desired, but no liability for accidents. Handbills containing full description and performances on the turf of "Financier" furnished by addressing ODEN BOWIE, mh1-2t Washington, D. C.

### SUPERIOR DEVON CATTLE.



THE subscriber can supply Devon Cattle of the best blood, and of all ages. His stock has been obtained from the most reliable sources, and bred with the greatest care.

Applications may be made to JNO. G. TURPIN, Esq., of Cloverdale, Chesterfield Co. Va., or to the subscriber at Rockville, Montgomery County, Md.

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THOS. W. STONESTREET.

### SOUTHERN NURSERY.



**40,000** APPLE TREES, embracing large number of Virginia and North Carolina Apples, keeping the whole winter, and equal in size and quality to the most popular Northern Sorts, which ripen here, with exceptions in the fall. Also a large stock of other fruits; Asparagus Roots, Ornamental Trees and Shrubs, Evergreens, &c. Selections will be made when desired by the proprietor, so as to afford a regular succession of fruits through the season. Priced Catalogues sent to all applicants.

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H. R. HOBEY  
Hopewell Nurseries, Fredericksburg, Va.

### Mowing and Reaping Machines.

ALLEN'S CELEBRATED REAPING AND MOWING MACHINES. These never clog, and can be worked on rough and stony surfaces. Wright's Reaper with Alkin's Self-Baker; Manny's, McCormick's and Hussey's Reaper, Ketchum's Mower, and all other good machines.

ALLEN'S Superior Horse Power and Thresher; also Bogardus's, Emory's, Hall's, Taplin's, and several other kinds. Agricultural and Horticultural Implements, a very large and complete assortment; Field and Garden Seeds of all sorts; Peruvian Guano, Superphosphate of Lime, Bone Dust, &c., &c.

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R. L. ALLEN,  
189 and 191 Water St., New York.

### A NEW WORK.

#### GARDENING FOR THE SOUTH.

BY W. N. WHITE, of Athens, Georgia. A most complete manual for every department of Horticulture, embracing the Vegetable Garden, the Fruit Garden, the Flower Garden, and the Pleasure Grounds, adapted particularly to the Southern States. Price \$1.25.

☞ To be obtained of all Bookellers, or sent by us prepaid to any part of the Union on receipt of price.

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C. M. SAXTON & CO.,  
Agricultural Book Publishers,  
140 Fulton St. New York.

### STEAM MARBLE WORKS,

Corner of North and Monument Sts. Balt., Md.

THE undersigned are prepared to furnish Marble Mantels, Monuments, Tombs, Grave Stones, Table Tops, Tiles for floors, Garden Statuary, Vases, &c., on reasonable terms, and at short notice; and would respectfully invite purchasers to call and examine their large and extensive stock now on hand. The trade furnished with Slabs—Blocks cut to size, &c., on reasonable terms.

mh1-ly

Sisson &amp; Baird.

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